EL-MOASSER

Mathematics

By a group of supervisors

PARENTS' GUIDE

Interactive E-learning Application

GPS

MINISTRY OF EDUCATION AND TECHNICAL EDUCATION

3rd PRIMARY FIRST TERM 2025

GENERAL NOTES
for parents

Dear parents...

This guide is intended to help you work with your child to improve his or her high ordered thinking (H.O.T.) in mathematics.

It contains activities which are arranged according to the daily practice at school. Each of them has been prepared in harmony with what your child learned at school, and focusing on specific skills.

You will find in each page of this guide, a hint about what your child learned at school (day by day), and the related home activities.

Each activity is clearly labeled with the skill it teaches, and with some additional information, and further activities or experiments written especially for you.

The book is designed in an artistic and beautiful way, to make your child appreciate colorful illustrations and have fun doing the different exercises.

For a better use of this guide, and for getting better results, here are some remarks and suggestions for you, parents :

- Try to make your child's learning time secure and happy.

- Do your best to transmit the message that learning is challenging, enjoyable, and rewarding.

- When you are working with your child using this guide, encourage him / her to talk and to explain (Why? How? ...)

- Connect math to daily life, and encourage your child to tell or show you how he or she uses math in daily life.

- Praise your child's successes and encourage his or her efforts.

- Offer positive help when your child makes a mistake, and treat errors as opportunities to help your child learn something new.

New Application

GPS

Interactive application presented from...

EL-MOASSER

How to use the application   1. Download the app.   2. Create an account.   3. Use the book code.

Enjoy

Interactive learning on all subjects and get all the app features free.

Explanation	Educational videos	Educational games	Interactive tests	Exercises

Connect with your teacher	Follow up reports	Notifications	Educational news

Index of Book

Revision

Activities to review what your child had learned in primary two.

Revision 1

1 Count the amount. Write the total.

175 L.E.

_____ L.E.

Can you buy the ball?
○ Yes ○ No

2 Write the time.

3 Subtract.

473
− 228

4 Write odd or even.

a. 31 _____   b. 42 _____

c. 90 _____   d. 87 _____

5 Compare using >, < or =.

a. 138 ○ 146

b. 599 ○ 499

300 + 60 + 8

Outcomes

Describe the skills your child will learn in each lesson of the chapter.

Outcomes of chapter one :

At the end of chapter one, your child will be able to:

▶ Lesson 1 :
Patterns
• Identify repeating and number patterns.
• Determine the next two elements in a pattern.

▶ Lesson 2 :
More of bar graphs
• Identify elements of a bar graph.
• Organize, represent, and analyze data from a bar graph.

▶ Lesson 3 :
Line plot
• Identify the elements of a line plot.
• Collect and record data.
• Create a line plot.

Title

The lesson title describes the skill your child will learn in this lesson.

Lesson 1

Patterns

Learn
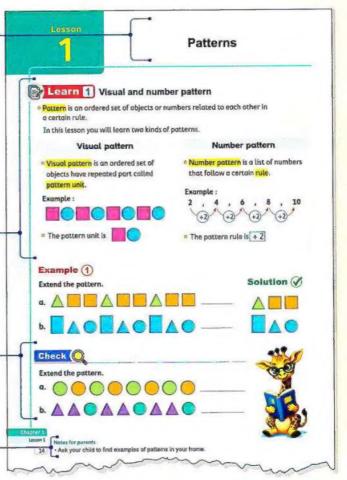
Explaning for the concept or the skill that your child should learned.

Learn 1 Visual and number pattern

○ **Pattern** is an ordered set of objects or numbers related to each other in a certain rule.

In this lesson you will learn two kinds of patterns.

Visual pattern

○ **Visual pattern** is an ordered set of objects have repeated part called **pattern unit**.

Example :

• The pattern unit is

Number pattern

○ **Number pattern** is a list of numbers that follow a certain **rule**.

Example :

2 , 4 , 6 , 8 , 10
(+2)(+2)(+2)(+2)

• The pattern rule is +2

Example ①

Extend the pattern.

a.

b.

Solution ✓

Check

A direct exercise to let your child check his/her understanding the concept.

Check

Extend the pattern.

a.

b.

Notes for parents

Extra activities to share with your child at home.

Chapter 1
Lesson 1
14   Notes for parents
• Ask your child to find examples of patterns in your home.

Exercise
Miscellaneous questions on the concept or the skill of the lesson.
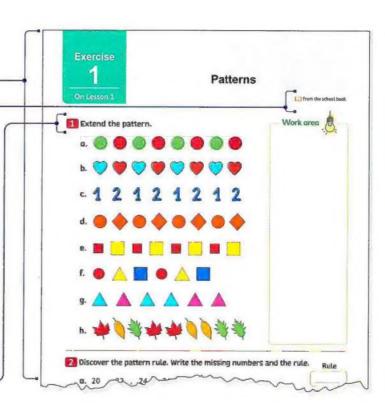
From the school book
Selected questions from the school book.

Direction
What your child needs to do for the activity.
Help your child by reading the directions and let him/her answer the question.
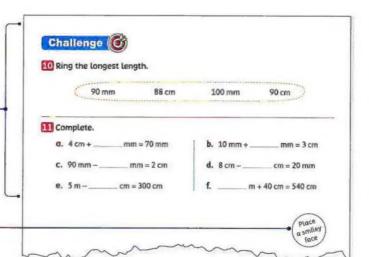
Challenge
A problem to challenge your child.
He/she may need your help to solve it.

Smiley faces stickers
Place a smiley face at the end of each lesson.

Exercise

1

On Lesson 1

Patterns

From the school book

1 Extend the pattern.

a.
b.
c. 1 2 1 2 1 2 1 2
d.
e.
f.
g.
h.

Work area

2 Discover the pattern rule. Write the missing numbers and the rule. Rule

a. 20 ___ ___ 24

Challenge

10 Ring the longest length.

90 mm   88 cm   100 mm   90 cm

11 Complete.

a. 4 cm + _____ mm = 70 mm
b. 10 mm + _____ mm = 3 cm
c. 90 mm – _____ mm = 2 cm
d. 8 cm – _____ cm = 20 mm
e. 5 m – _____ cm = 300 cm
f. _____ m + 40 cm = 540 cm

Place a smiley face

I like to give helpful math tips.

I will help you remember. You will not forget with me around.

Remember
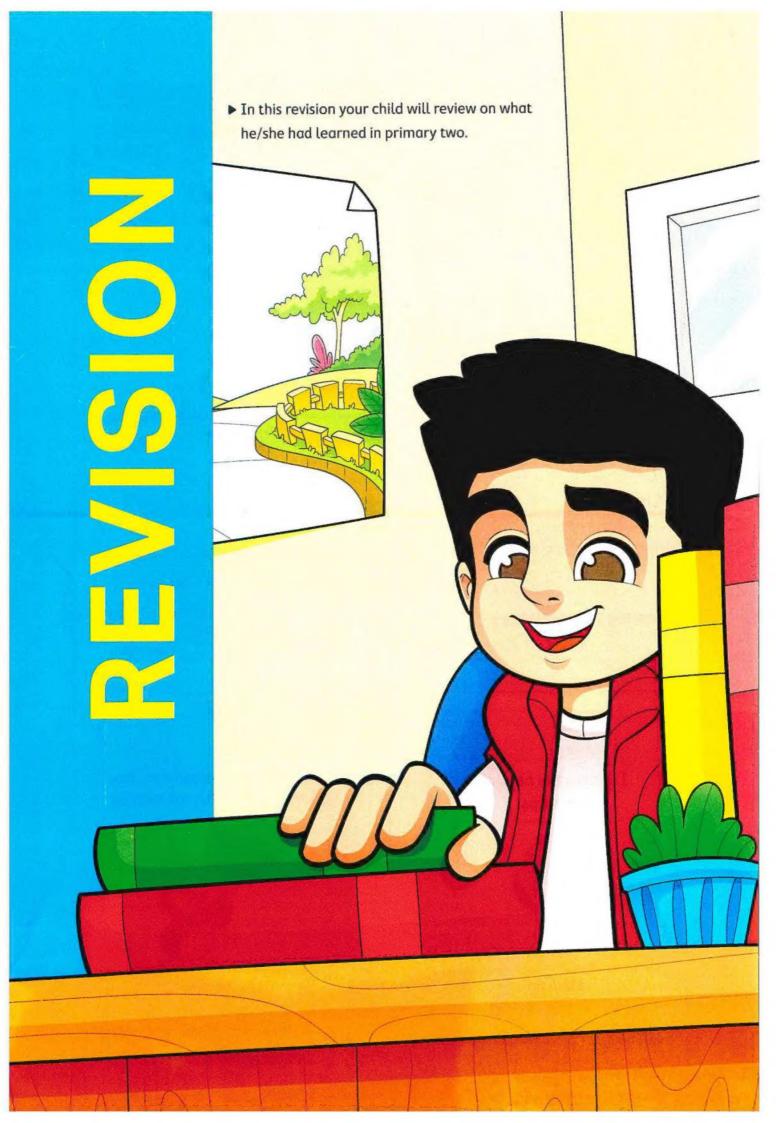
Math tip
The Math tip mascot provides your child hints or tips when doing math.
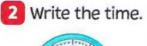
Remember
The Remember mascot helps your child connect previous knowledge to the lesson or concept.
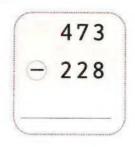
REVISION

► In this revision your child will review on what he/she had learned in primary two.

Revision 1

1 Count the amount. Write the total.

175 L.E.

_____ L.E.

Can you buy the ball?

○ Yes   ○ No

2 Write the time.

____ : ____

3 Subtract.

$$473 - 228$$
_____

4 Write odd or even.

a. 31 _____

b. 42 _____

c. 90 _____

d. 87 _____

5 Compare using >, < or =.

a. 138 ○ 146

b. 599 ○ 499

c. 368 ○ 300 + 60 + 8
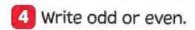
6 Choose. Number of vertices of a cube is _____

○ 5   ○ 6

○ 8   ○ 12

7 Round each number to the nearest hundred.

a. 95 _____

b. 261 _____

c. 739 _____

8 238 hot dog sandwiches were sold. 415 burger sandwiches were sold. How many sandwiches were sold together?

_____

_____
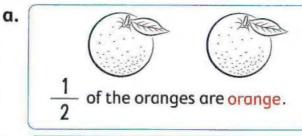
9 Use the pictograph. How many children like mango juice best?

Favorite juice	
Apple	☺☺☺☺
Orange	☺☺☺☺☺
Mango	☺☺◖

Key ☺ = 2 children

○ 4   ○ 5

○ 8   ○ 9

10 Color to show the fraction.

a.

$\frac{1}{2}$ of the oranges are orange.

b.

$\frac{3}{4}$ of the mangoes are green.

Revision 2

1 Complete.

a. _____ $= 700 + 50 + 4$

b. Number of sides of a triangle is _____

c. Two thirds $= \dfrac{}{}$

d. $19 - \dfrac{}{} = 10$

e. Five hundred fifteen in standard form is _____

2 Add to find the total.

$$23 + 14 + 39 + 16$$

_____

_____

3 Choose.
The mass of 🍉 is about _____
- ⭕ 1 gm
- ⭕ 5 kg
- ⭕ 50 kg
- ⭕ 100 kg

4 Choose.

$61 + 28$
is about _____
- ⭕ 80
- ⭕ 70
- ⭕ 90
- ⭕ 40

5 Draw the hour hand and the minute hand.

06:45
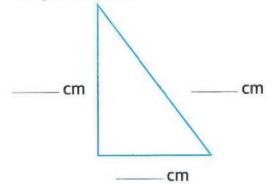
6 Measure and write the length of required sides.

_____ cm   _____ cm

_____ cm

7 Count the amount and write the total.

a.

_____ L.E.

b.

_____ L.E.
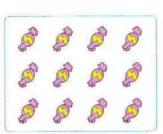
8 Omar has 354 pounds.
He gave his sister Mariam 160 pounds.
How much money does he have left ?

_____

_____

9 Complete each pattern.

a. 13, 15, 17, _____ , _____ , _____

b. 89, 79, 69, _____ , _____ , _____

c. 5, 10, 15, _____ , _____ , _____

10 Choose.
The repeated addition equation of the opposite array is _____
- ⭕ $4 + 4 + 4 + 4$
- ⭕ $3 + 3 + 3$
- ⭕ $4 + 4$
- ⭕ $3 + 3 + 3 + 3$

Revision 3

1 Complete.

a. Number of vertices of trapezium is _____

b. The number of rows of the array | 3 by 5 | is _____

c. The value of 7 in the number 678 is _____

d. ____ − 19 = 7

2 Dalia baked a pizza and cut it into three equal pieces. Her brother ate one of them. What fraction of the pizza left ?

The fraction is ———

3 Add.

a.
$$257 + 81$$

b.
$$139 + 440$$
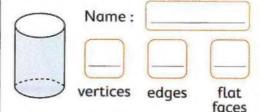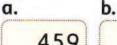
4 Name the solid and write the missing number.

Name : _____

_____ vertices   _____ edges   _____ flat faces

5 Subtract.

a.
$$459 - 226$$

b.
$$308 - 120$$

6 Use the bar graph. How many coins are saved on Monday ?

Saved coins

Number of coins / Days

Sunday   Monday   Tuesday

○ 5
○ 8
○ 10
○ 6

7 Arrange from the greatest to the smallest.

| 129 | | 291 | | 219 | | 192 |

Order is : _____ , _____ , _____ , _____

8 Write the following numbers in words.

a. 80 _____   **b.** 5 _____

c. 14 _____   **d.** 60 _____
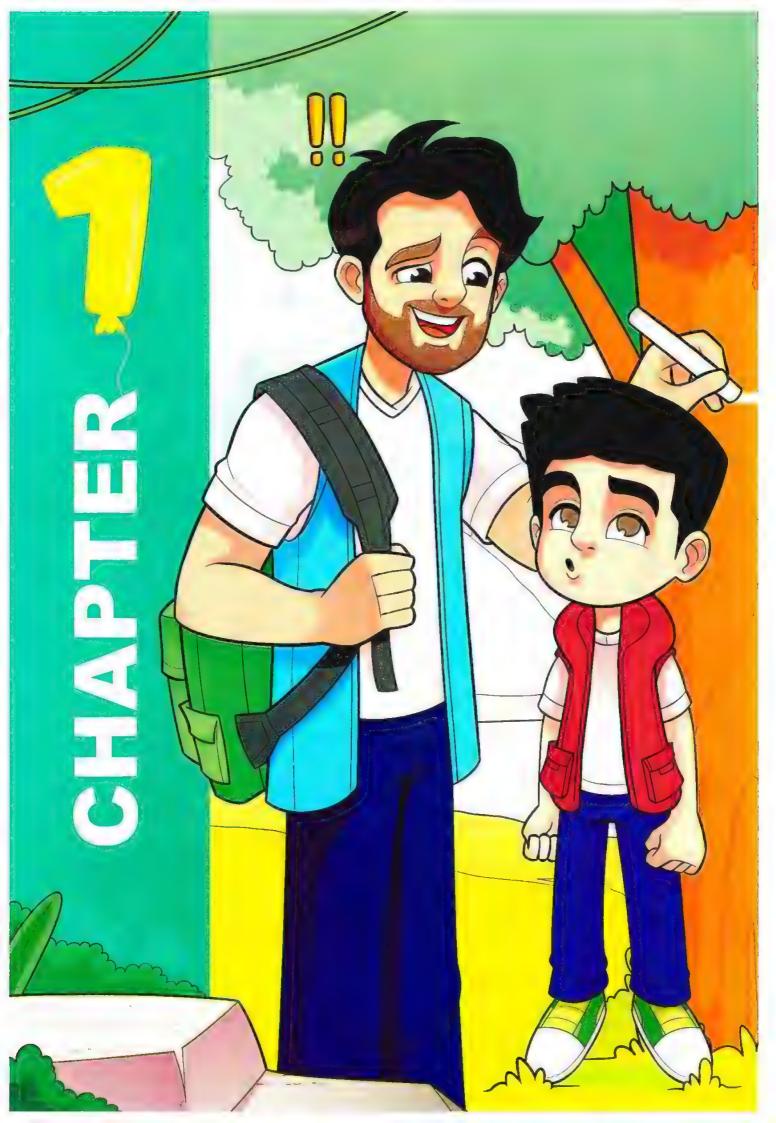
9 Write the time. Then circle A.M. or P.M.

Play basketball

_____ : _____

A.M.   P.M.
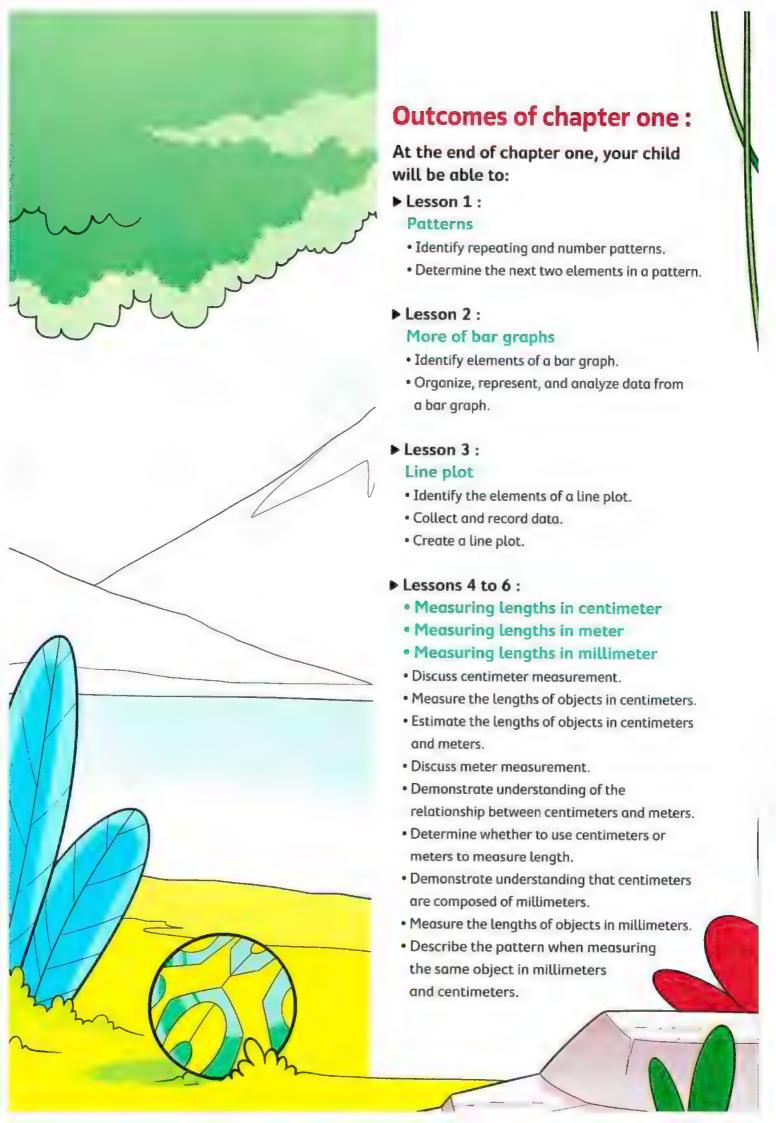
10 A fruit seller bought 67 kilograms of orange and 85 kilograms of apple.

What is the weight in all ?

_____

_____

Outcomes of chapter one :

At the end of chapter one, your child will be able to:

▶ **Lesson 1 :**
Patterns
- Identify repeating and number patterns.
- Determine the next two elements in a pattern.

▶ **Lesson 2 :**
More of bar graphs
- Identify elements of a bar graph.
- Organize, represent, and analyze data from a bar graph.

▶ **Lesson 3 :**
Line plot
- Identify the elements of a line plot.
- Collect and record data.
- Create a line plot.

▶ **Lessons 4 to 6 :**
- **Measuring lengths in centimeter**
- **Measuring lengths in meter**
- **Measuring lengths in millimeter**
- Discuss centimeter measurement.
- Measure the lengths of objects in centimeters.
- Estimate the lengths of objects in centimeters and meters.
- Discuss meter measurement.
- Demonstrate understanding of the relationship between centimeters and meters.
- Determine whether to use centimeters or meters to measure length.
- Demonstrate understanding that centimeters are composed of millimeters.
- Measure the lengths of objects in millimeters.
- Describe the pattern when measuring the same object in millimeters and centimeters.

Patterns

Learn 1 Visual and number pattern
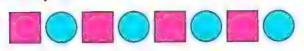
○ **Pattern** is an ordered set of objects or numbers related to each other in a certain rule.

In this lesson you will learn two kinds of patterns.

Visual pattern

○ **Visual pattern** is an ordered set of objects have repeated part called **pattern unit**.

Example :

○ The pattern unit is

Number pattern

○ **Number pattern** is a list of numbers that follow a certain **rule**.

Example :

2 , 4 , 6 , 8 , 10
+2   +2   +2   +2

○ The pattern rule is $+ 2$

Example 1

Extend the pattern.

Solution ✓

a.

b.

Check

Extend the pattern.

a.

b.
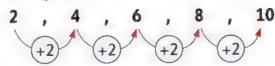
Example ②

Discover the pattern rule to extend the pattern and write the rule.
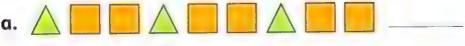
a. 10 , 20 , 30 , 40 , ——— , ———   Rule ▶ [   ]

b. 95 , 90 , 85 , 80 , ——— , ———   Rule ▶ [   ]
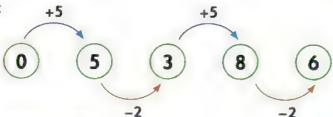
Solution ✓

a. 50 , 60   Rule ▶ [+ 10]   ▶ **Note** : The numbers are getting larger.

b. 75 , 70   Rule ▶ [– 5]   ▶ **Note** : The numbers are getting smaller.

Remark

o Sometimes number patterns have a rule that requires to add and subtract in the same pattern.

Notice the numbers are increasing and decreasing in the same pattern.

For example :

```
        +5              +5
   0    5    3    8    6
          -2         -2
```

The rule is : [+ 5 , –2]

Check

Use the pattern rule to extend the pattern.

```
    +3      +3      +3      +3      +3      +3
27      30      33      36      39      ___     ___
```

```
   -10     -10     -10     -10     -10     -10
96      86      76      66      56      ___     ___
```
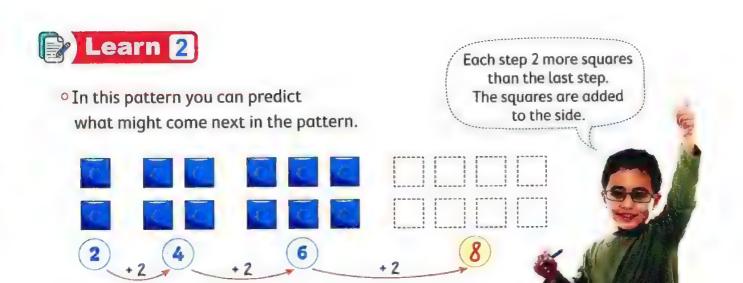
• Practice your child skip-counting by twos, threes, fours, fives and tens.
• Ask your child to find the rule and follow it to complete the patterns.
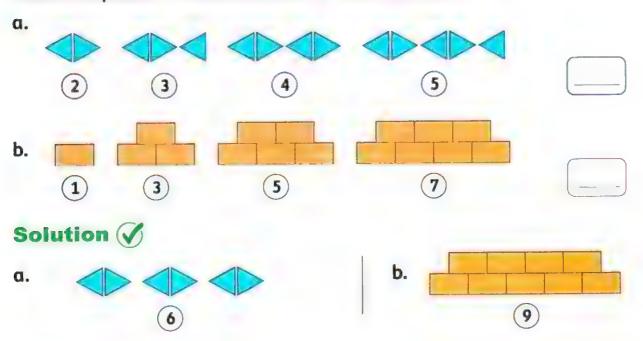
15

Learn 2

Each step 2 more squares than the last step. The squares are added to the side.

○ In this pattern you can predict what might come next in the pattern.

2 +2 4 +2 6 +2 8
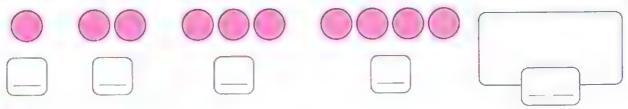
So, The next step has 8 squares.

Example 3

Extend the pattern. Write the number of items you draw.

a.

2   3   4   5   ____

b.

1   3   5   7   ____

Solution ✓

a.

6

b.

9

Check 🔍

Draw what might come next in the pattern. Write the number of items in each step.

____   ____   ____   ____   ____

Notes for parents
• Help your child build a pattern using small objects such as : dry pasta.

Patterns

1 Extend the pattern.

a.

b.

c. **1 2 1 2 1 2 1 2**

d.

e.

f.

g.

h.

Work area

2 Discover the pattern rule. Write the missing numbers and the rule.

Rule

a. 20 , 22 , 24 , 26 , ——— , ———

b. 70 , 65 , 60 , 55 , ——— , ———

c. 83 , 73 , 63 , 53 , ——— , ———

d. 12 , 23 , 34 , 45 , ——— , ———

e. 21 , 31 , 41 , 51 , ——— , ———

f. 49 , 46 , 43 , 40 , ——— , ———

3 Find the rule. Complete in the same pattern.

a. 📖 30 , 40 , 50 , 60 , 70 , ____ , ____ , ____ , ____ , ____

b. 📖 52 , 54 , 56 , 58 , ____ , ____ , ____ , ____ , ____

c. 39 , 35 , 31 , 27 , ____ , ____

d. 98 , 88 , 78 , 68 , ____ , ____

e. 33 , 37 , 41 , 45 , ____ , ____

f. 120 , 125 , 130 , 135 , ____ , ____

g. 95 , 90 , 85 , 80 , ____ , ____

h. 58 , 54 , 50 , 46 , ____ , ____

i. 10 , 22 , 34 , 46 , ____ , ____

j. 24 , 35 , 46 , 57 , ____ , ____
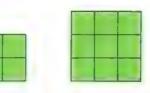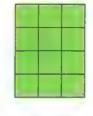
4 Draw what comes next in each pattern. Write the number of items in each step.

a.

| ___ | ___ | ___ | ___ | ___ |

b.

| ___ | ___ | ___ | ___ | ___ |

c.

| ___ | ___ | ___ | ___ |

d. 📖

□ □ □ □ □

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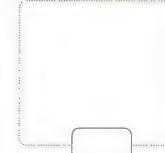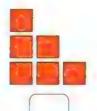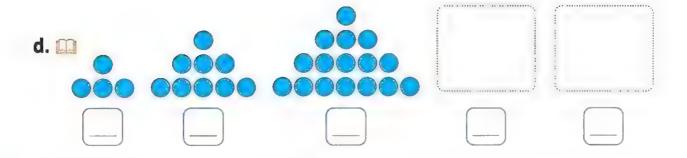
5 Color to complete the pattern.

a.

b.

c.
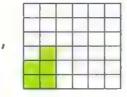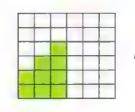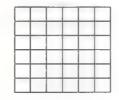
Challenge 🎯

6 Find the rule. Extend the pattern.

a. 30 , 35 , 33 , 38 , 36 , 41 , 39 , _____ , _____

b. 1 , 2 , 4 , 7 , 11 , _____ , _____

c. 1 , 1 , 2 , 3 , 5 , _____ , _____

d.

Place a smiley face

19

More of bar graphs

Tally marks, tally table and bar graph

○ Tally mark is a mark used to record votes or other items.

Tally marks

| means **1** ||||| means **5**

Two **2** ||

Five **5** |||||

Eight **8** ||||| |||

Tally						|||||
Number	1	2	3	4	5
Tally	|||||		||||| ||	||||| |||	||||| ||||	||||| |||||
Number	6	7	8	9	10

○ Tally table is a table uses tally marks to record data.

Example ①

This a survey about favorite time of a day. Make a tally table and then use it to make a bar graph.

Solution ✓

Favorite times of day

Times of day	Tally	Number
Morning	||||	4
Lunchtime	|||	3
Afternoon	||||| |||	8
Evening	|||	3
Night time	||	2

Tally table

| Morning	Night time
Evening	Lunchtime
Afternoon	Afternoon
Afternoon	Afternoon
Evening	Morning
Afternoon	Lunchtime
Lunchtime	Morning
Morning	Afternoon
Evening	Night time
Afternoon	Afternoon

Think
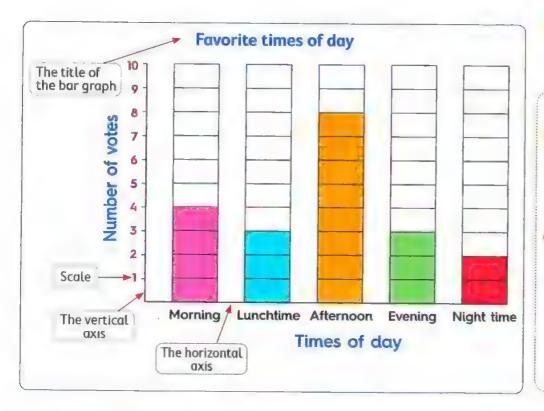
It is better to record votes by using tally table than record it by writing its name.

Notes for parents

• Ask your child to use tally marks to count the number of girls and the number of boys in his/her family.
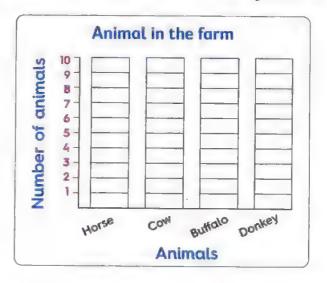
Favorite times of day

The title of the bar graph

Number of votes

Scale

The vertical axis

The horizontal axis

Morning Lunchtime Afternoon Evening Night time

Times of day

Check

Complete the tally table. Color the graph to show data, then answer the questions.

Animals in the farm

Animal	Tally	Number
Horse	||	____
Cow	ⵏⵏⵏ	____
Buffalo	ⵏⵏⵏ |||	____
Donkey	|||	____

Animal in the farm

Number of animals

Horse   Cow   Buffalo   Donkey

Animals

- What is the number of cows in the farm ? _____

- Which animal has the greatest number ?_____

- Which animal has the least number ? _____

- How many animals are there in the farm ? _____
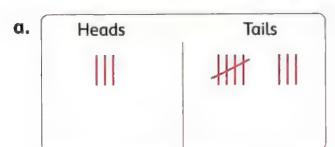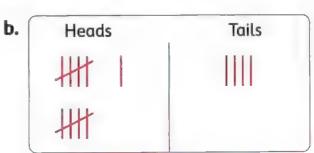
More of bar graphs

1 Here are some other tallies.
Count how many heads, how many tails, and how many in all.
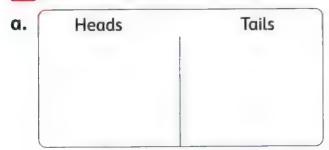
a.

Heads	Tails
|||	☰ |||

- How many heads ? _____
- How many tails ? _____
- How many in all ? _____

b.

Heads	Tails
☰ |	||||
☰	

- How many heads ? _____
- How many tails ? _____
- How many in all ? _____

---

2 Show the tallies for each chart.

a.

Heads	Tails

- Show 7 heads.
- Show 13 tails.
- How many in all ? _____

b.

Heads	Tails

- Show 12 heads.
- Show 18 tails.
- How many in all ? _____

LEARN

A B C

3 Hany made this list of the shirt colors his friends were wearing.

Make a tally table. Then answer.
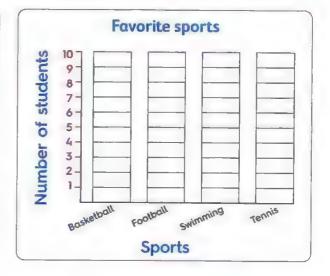
a. How many children were wearing blue shirts ? _____

b. What was the color of the most shirt ?_____

c. List the shirt color data from the least to the greatest : _____ , _____ , _____

Shirt color			
Blue	Red	Blue	Green
Green	Green	Blue	Red
Blue	Blue	Red	Blue
Red	Red	Blue	Red
Blue	Blue	Blue	Red

Shirt color		
Color	**Tally**	**Number**
___		___
___		___
___		___

---

4 **Count the tallies. Write the total. Color the graph to show the data.**

Favorite sports		
Sports	**Number of students**	**Number**
Basketball	IIII	___
Football	HHI III	___
Swimming	HHI I	___
Tennis	III	___

Favorite sports

Number of students: 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Basketball   Football   Swimming   Tennis

Sports

Answer the questions :

a. How many students did vote for football ?

_____ students.
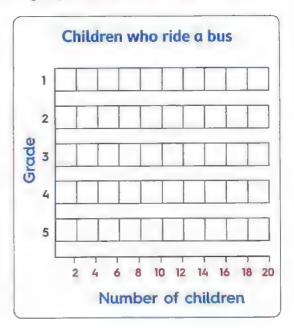
b. Which sport is favored by the most ? _____

c. Which sport is favored by the least ? _____

5 Count the tallies. Write the total. Color the graph to show the data.

Children who ride a bus		
Grade	Number of children	Number
1	~~HHI~~ HHI HHI	_____
2	HHI HHI HHI |	_____
3	HHI HHI HHI	_____
4	HHI HHI HHI HHI	_____
5	HHI HHI HHI |||	_____

Children who ride a bus

Grade (vertical axis): 1, 2, 3, 4, 5

Number of children (horizontal axis): 2 4 6 8 10 12 14 16 18 20

1. Answer the following questions :

   a. How many children in grade 4 ride the bus to school ? _____

   b. How many children in grade 3 ride the bus to school ? _____

   c. Which grade has the most children who ride the bus ? _____

   d. Which grade has the least children who ride the bus ? _____

2. Put (✓) to the correct statement or (✗) to the incorrect statement.

   a. Number of children in grade 5 who ride bus to school is greater than number of children in grade 2 who ride bus to school. (   )

   b. Number of children are equal in grade 2 and 3 who ride bus to school. (   )

   c. Number of children in grade 3 who ride bus to school is 15 (   )

   d. Number of children in grade 1 and grade 4 who ride bus to school is 60 (   )

6 This is a survey about our favorite season in the class.
Make a tally table and then use it to make a bar graph.

Our favorite season

Season	Tally	Number
Winter		____
Spring		____
Summer		____
Fall		____

Summer	Winter	Summer	Fall
Fall	Winter	Winter	Summer
Fall	Summer	Summer	Fall
Winter	Fall	Summer	Spring
Spring	Summer	Fall	Summer

Favorite season

Number of children

10
9
8
7
6
5
4
3
2
1

Winter   Spring   Summer   Fall

Seasons

1. **Answer the questions.**

   a. Which season is favored by the most ? _____

   b. Which season is favored by the least ? _____

   c. How many students did vote in total ? _____
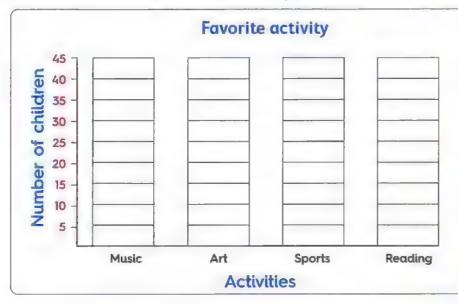
2. **Put (✓) to the correct statement or (✗) to the incorrect statement.**

   a. Number of students who liked summer is 8   (   )

   b. Number of students who liked fall more than winter is 3   (   )

   c. Number of students who liked spring and summer altogether is 10   (   )

7 Complete the tally table, then use it to make a bar graph.

Favorite activity

Activity	Tally	Number
Music	||||| ||||| ||||| |||||	_____
Art	||||| ||||| ||||| ||||| |||||	_____
Sports	||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||	_____
Reading	||||| ||||| ||||| ||||| |||||	_____

● Convert the same data into a bar graph.

Favorite activity

Number of children

45
40
35
30
25
20
15
10
5

Music   Art   Sports   Reading

Activities

1. Answer following questions.

   a. How many people liked music best ? _____ people.

   b. Which activity is liked the least ? _____

   c. Which activity is liked the most ? _____.

   d. How many people in all liked art and sports activities ? _____ people.

   e. How many people liked sports more than art ? _____ people.

2. Compare. Write ">, = or <".

   a. Number of people who liked reading. ◯ Number of people who liked art.

   b. Number of people who liked sports. ◯ Number of people who liked music.

Place a smiley face

Line plot

Learn What is a line plot ?
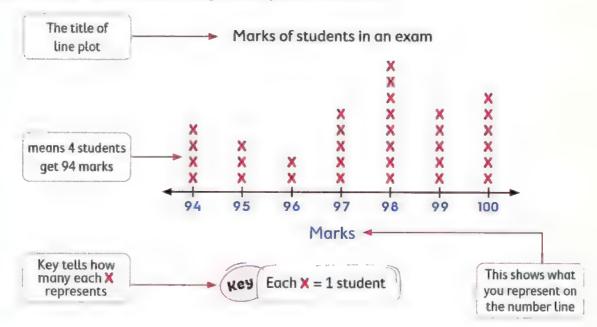
- Line plot is a graph shows how many times something happened.
- It is a graph that shows the data as **X**'s above a number line.

Example

The following table shows the marks of students in an exam :

Marks	94	95	96	97	98	99	100
Number of students (frequency)	4	3	2	5	8	5	6

You can show these data using a line plot as follows :

The title of line plot → Marks of students in an exam

means 4 students get 94 marks →

Key tells how many each **X** represents → **Key** Each **X** = 1 student

This shows what you represent on the number line

94 95 96 97 98 99 100

Marks

From the graph :

- The number of students who get 98 marks is 8 students.
- The number of students who get smaller than 98 is 5 + 2 + 3 + 4 = 14 students.
- The number of students who get greater than 98 is 5 + 6 = 11 students.
- The number of students who get the highest mark is 6 students.
- The number of students who get the lowest mark is 4 students.

Notes for parents

• Tell your child that the "frequency" means how many times a piece of data appears.

Example

The following data shows the weights of 30 students in kilograms.

Make a line plot to show these data, and then answer the questions.

28	26	29	24	26	30
30	25	28	27	28	26
24	30	25	30	28	28
25	26	28	25	28	30
26	24	29	24	30	26

a. How many students weight 25 kilograms ? _____

b. What is the frequency of 28 in these data ? _____

c. What weight has the most frequency ? _____

d. What weight has the least frequency ? _____

e. How many students weight less than 26 kilograms ? _____

f. How many students weight more than 27 kilograms ? ___

Solution ✓

To make a line plot for these data follow the following steps :

First : Determine the lowest and the greatest weight.
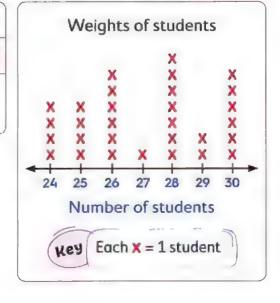
• The lowest weight = 24 kilogram.   • The greatest weight = 30 kilogram.

Second : Make a tally table shows how many times each weight appears.

Weights	24	25	26	27	28	29	30
Tallies	IIII	IIII	HHTI	I	HHTII	II	HHTI
Number of students (Frequency)	4	4	6	1	7	2	6

a. 4 students

b. 7 students

c. 28 kilograms

d. 27 kilograms

e. 4 + 4 = 8 students

f. 7 + 2 + 6 = 15 students

Weights of students

Number of students

Key Each **x** = 1 student

Notes for parents

• Remind your child that a number line can start at any number, and the numbers go on forever.

The opposite data shows the number of books read by 20 children in a month, complete the tally table, and make a line plot.

How many books did you read in this month?				
4	5	2	3	4
6	1	4	1	5
1	5	0	4	5
5	2	4	5	6
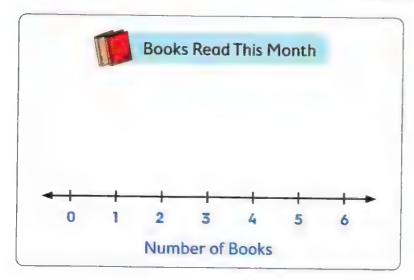
Number of books	0	1	2	3	4	5	6
Tallies							
Number of children							

Books Read This Month

Key Each **X** = 1 child

Number of Books

Answer the following questions :
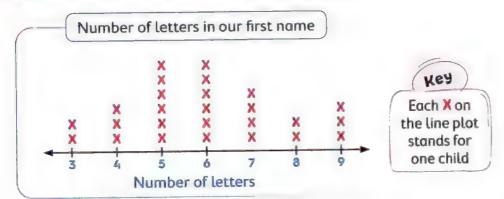
a. How many children read 6 books ? ———

b. How many children read 4 books ? ———

c. How many children did not read any book ? ———
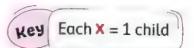
d. How many children read more than 3 books ? ———

e. How many children read 10 books ? ———
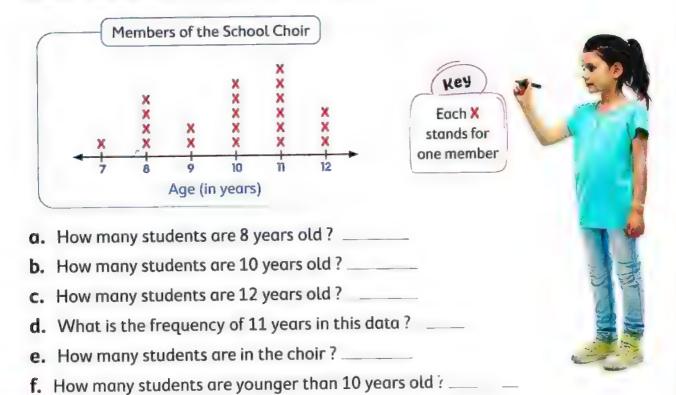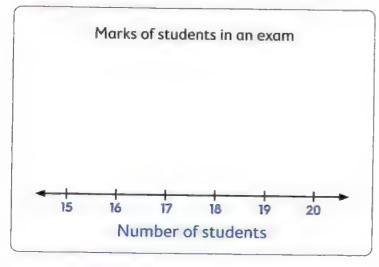
• Remind your child that "卌" equals 5 times.

Line plot

1 Use the line plot to answer the questions.

Number of letters in our first name

Number of letters

Key

Each **X** on the line plot stands for one child

a. How many children have 5 letters in their first name ? _____ children.

b. What is the smallest number of letters in a child's first name ? _____ letters.

c. What is the greatest number of letters in a child's first name ? _____ letters.

---

2 The data in this line plot shows the ages of a group of students in a school choir. The number line shows the ages of the students.
Use the line plot to answer the questions.
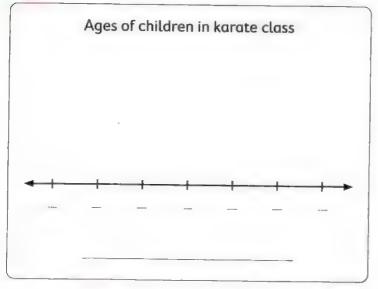
Members of the School Choir

Age (in years)

Key

Each **X** stands for one member

a. How many students are 8 years old ? _____

b. How many students are 10 years old ? _____

c. How many students are 12 years old ? _____

d. What is the frequency of 11 years in this data ? _____

e. How many students are in the choir ? _____

f. How many students are younger than 10 years old ? _____

3 Use the table to draw a line plot.

Marks of students in an exam

15   16   17   18   19   20

Number of students

Key | Each **X** = _____ student

Marks of students in an exam	
Marks	**Number of students**
15	2
16	1
17	3
18	5
19	4
20	2

4 Use the table to draw a line plot.

Ages of children in karate class

Key _____

Ages of children in karate class	
Age in years	**Tallies**
7	||
8	||||
9	||
10	⊬|
11	|||
12	||
13	|

Use the line plot to answer the questions :

a. How many children in the class are 11 years ? _____ children.

b. What age is the greatest number of children ? _____ years old.
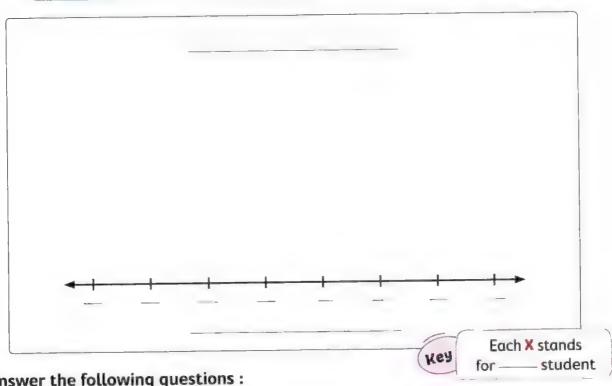
c. How many children are in karate class in all ? _____ children.

5 The following numbers are the number of study hours per week for a number of students.

15	14	17	20	21	19
20	18	19	14	16	15
21	15	18	16	19	20
14	17	19	21	20	15
16	14	15	19	21	20

Hours								
Tally								
Frequency								

Key — Each **X** stands for ——— student

Answer the following questions :

a. How many students study 17 hr. per week ? ———

b. How many students study 21 hr. per week ? ———

c. What is the greatest number of students study a certain number of hours ? ———

d. What is the smallest number of students study a certain number of hours ? ———

6 The following numbers are the money saved by a number of children in a week in pounds.

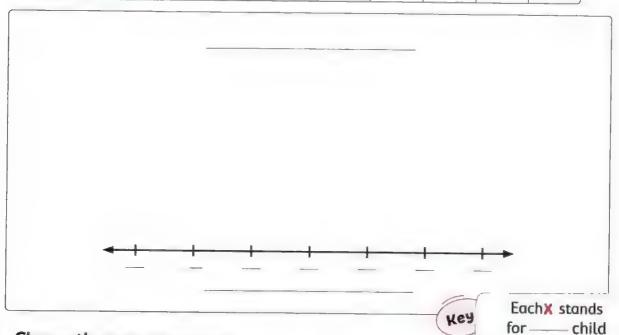| 50	60	40	30	90	80
40	50	60	70	80	90
50	70	80	90	60	50
70	50	50	60	80	50
70	60	50	40	50	80

Saved money							
Frequency							

Key — Each **X** stands for ——— child

1. **Choose the correct answer.**
   a. The number of children saving 90 pounds is ———   (3 or 4 or 5)
   b. The number of children saving the least amount of money is ———
      (3 or 2 or 1)
   c. The greatest number of children saved ——— pounds. (50 or 60 or 90)

2. **Put (✓) to the correct statement or (X) to the incorrect statement.**
   a. The number of children who saved 70 pounds is 4.   (   )
   b. The smallest number of children saved 50 pounds.   (   )
   c. The number of all children in all is 90.   (   )

Place a smiley face

- **Measuring lengths in centimeter**
- **Measuring lengths in meter**
- **Measuring lengths in millimeter**
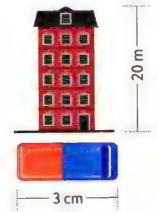
Learn 1 Length units (meter, centimeter and millimeter)

○ **Meter (m) :**

Used to measure distances and longer lengths as : buildings and buses.

○ **Centimeter (cm) :**
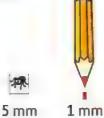
A centimeter (cm) is a small standard unit of measuring length, used to measure the length of small objects as : pencils, books and erasers.
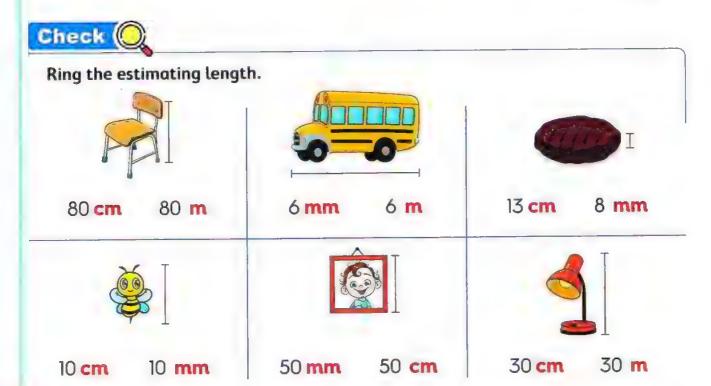
○ **Millimeter (mm) :**

- A millimeter (mm) is a very small standard unit of measuring length.

  It is used to measure the length of a very small object as the length of an insect.

- A millimeter is about the width of the point of the end of your pencil.

20 m

3 cm

5 mm   1 mm

Check

Ring the estimating length.

80 **cm** 80 **m**	6 **mm** 6 **m**	13 **cm** 8 **mm**
10 **cm** 10 **mm**	50 **mm** 50 **cm**	30 **cm** 30 **m**

Notes for parents

- Ask your child to find something at home is about 5 cm in length, width or height, and another something is about 1 m
- Ask your child to find objects at home he/she can measure it in millimeter.

Learn 2 Converting length units

There are 100 centimeters in 1 meter

$$1\text{ m} = 100\text{ cm}$$

Example :

- o 2 m = 200 cm
- o 5 m = 500 cm
- o 8 m = 800 cm

When moving from meters to centimeters, the number gets two zeros on the end.

There are 10 millimeters in 1 centimeter

$$1\text{ cm} = 10\text{ mm}$$

Example :
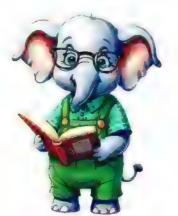
- o 2 cm = 20 mm
- o 4 cm = 40 mm
- o 19 cm = 190 mm

When moving from centimeters to millimeters, the number gets a zero on the end.

Example ①

Complete.

a. 6 m = _____ cm

b. 9 m = _____ cm

c. 5 cm = _____ mm

d. 28 cm = _____ mm

e. _____ m = 700 cm

f. _____ cm = 120 mm

g. 2 m + 5 m = _____ + _____ = _____ cm

h. 6 m + 30 cm = _____ + _____ = _____ cm

i. 30 cm + 10 mm = _____ + _____ = _____ mm

j. 60 cm + 20 cm = _____ + _____ = _____ mm

Solution ✓

a. 600

b. 900

c. 50

d. 280

e. 7

f. 12

g. 200 cm + 500 cm = 700 cm

h. 600 cm + 30 cm = 630 cm

i. 300 mm + 10 mm = 310 mm

j. 600 mm + 200 mm = 800 mm

• Later in this year, your child will understand that when moving from centimeters to millimeters he/she can multiply by 10.

Example ②

Compare, write "> , = or <".

a. 9 cm ☐ 9 mm

b. 50 mm ☐ 5 cm

c. 20 cm ☐ 200 mm

d. 80 cm ☐ 90 mm

e. 3 m + 15 cm ☐ 315 cm

f. 7 cm + 5 mm ☐ 705 mm

Solution ✓

a. 9 cm $>$ 9 mm
   90 mm

b. 50 mm $=$ 5 cm
   50 mm

c. 20 cm $=$ 200 mm
   200 mm

d. 80 cm $>$ 90 mm
   800 mm

e. 3 m + 15 cm $=$ 315 mm
   300 + 15 = 315 cm

f. 7 cm + 5 mm $<$ 705 mm
   70 + 5 = 75 mm

Check

Complete.

a. 3 m = _____ cm

b. 8 cm = _____ mm

c. 10 cm = _____ mm

d. _____ m = 400 cm

e. _____ cm = 400 mm

f. _____ cm = 250 mm

g. 40 cm + 20 mm = _____ + _____ = _____ mm

h. 207 cm = _____ m + _____ cm
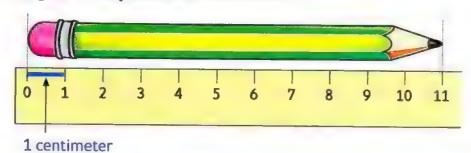
Step 1

Line up one end of the pencil with the zero mark on the ruler.

Step 2
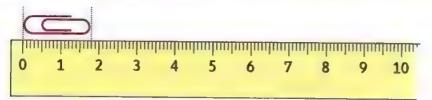
Find the centimeter mark on the ruler that is at the other end of the pencil.

○ **What is the length of the pencil in centimeters ?**

1 centimeter
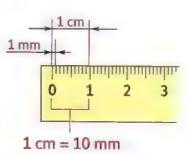
The length of the pencil is _11 cm_
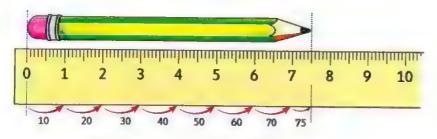
○ **What is the length of the paper clip in millimeters ?**
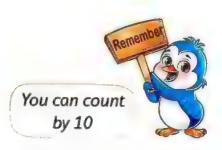
The paper clip is 18 millimeter.

1 cm

1 mm

1 cm = 10 mm

○ **What is the length of the pencil in millimeters ?**

10 20 30 40 50 60 70 75
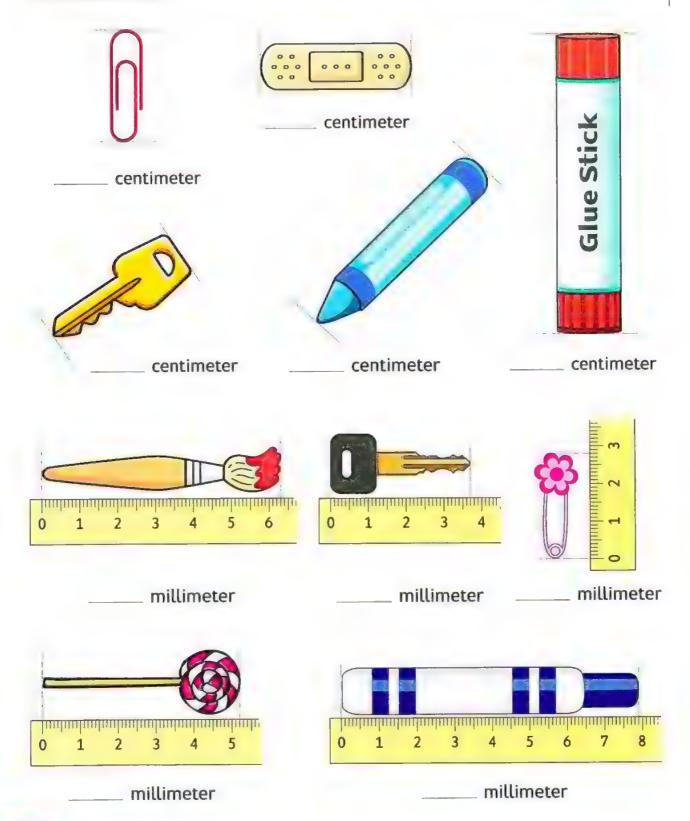
The pencil is 75 millimeter.

Remember

You can count by 10

• Ask your child to measure the lengths of his/her coloring pencils then arrange them from the shortest to the longest.

Measure the length of each object. Circle the longest one and tick (✓)
the shortest one.

_____ centimeter

_____ centimeter

Glue Stick

_____ centimeter   _____ centimeter   _____ centimeter

_____ millimeter   _____ millimeter   _____ millimeter

_____ millimeter   _____ millimeter
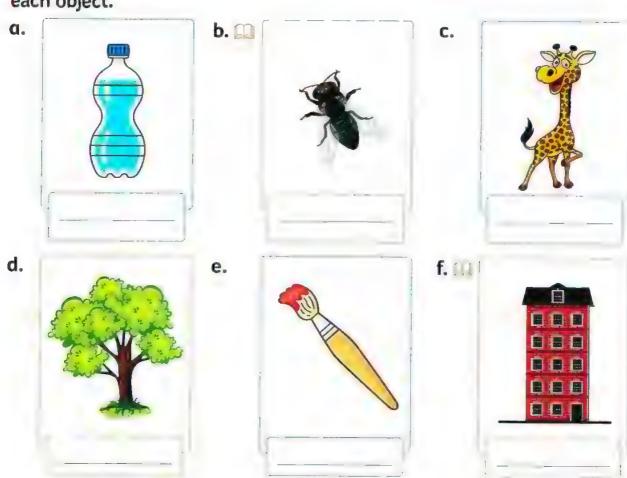
Notes for parents
• Give your child 4 strings and ask him/her to use a ruler to measure their lengths, then put them in
order from the longest to the shortest.
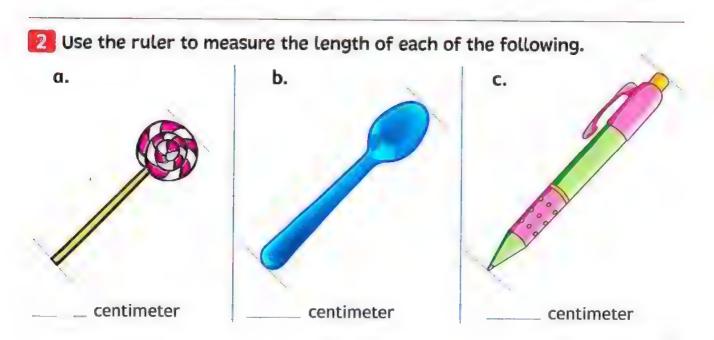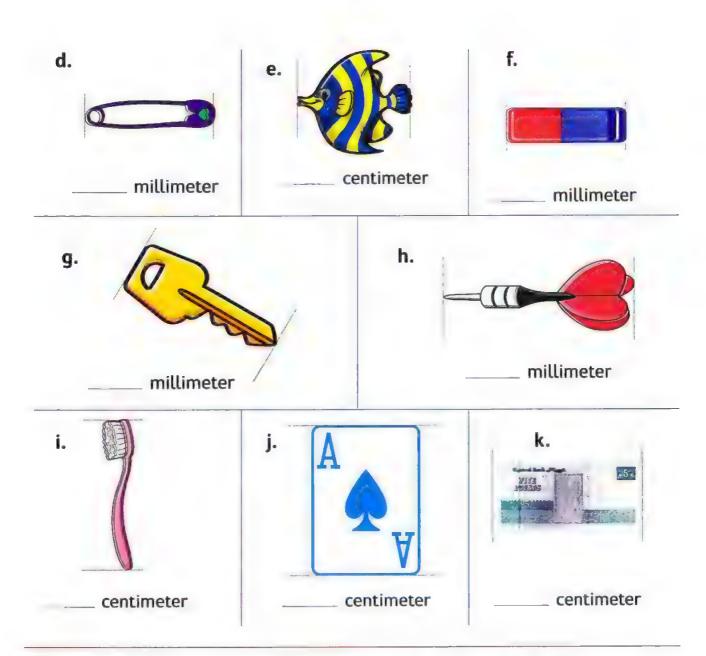
- **Measuring lengths in centimeter**
- **Measuring lengths in meter**
- **Measuring lengths in millimeter**

From the school book
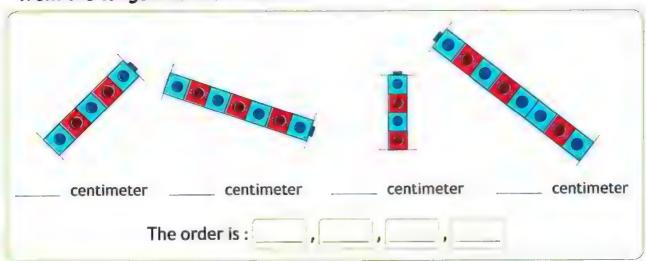
1 Write the suitable unit (meter or centimeter or millimeter) to measure each object.

a.

b.

c.

d.

e.

f.

2 Use the ruler to measure the length of each of the following.

a.

_____ centimeter

b.

_____ centimeter

c.

_____ centimeter

d.

_____ millimeter

e.

_____ centimeter

f.

_____ millimeter

g.

_____ millimeter

h.

_____ millimeter

i.

_____ centimeter

j.

_____ centimeter

k.

_____ centimeter
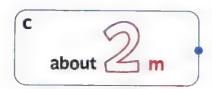
3 Measure the length of each stripe and write its length, then arrange from the longest to the shortest.

_____ centimeter _____ centimeter _____ centimeter _____ centimeter

The order is : _____ , _____ , _____ , _____

4 Estimate and match.

a about 2 cm

b about 10 m

c about 2 m

d about 10 cm

1

2

3

4

5 Put (✓) to the correct statement or (✗) to the incorrect statement.
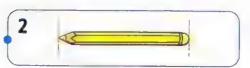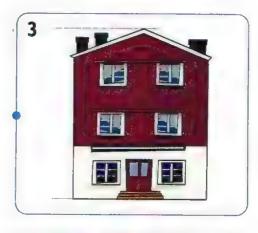
a. The length of a bus is about 5 cm (   )

b. The length of your book is about 30 cm (   )

c. The length of an insect is about 3 m (   )

d. The length of your pen is about 15 cm (   )

e. Millimeter is a suitable unit to measure the length of large distances. (   )

6 Choose the correct answer.

a. 3 cm = _____ mm   (3 or 30 or 300)

b. 24 cm = _____ mm   (240 or 40 or 200)

c. 70 mm = _____ cm   (70 or 700 or 7)

d. 500 mm = _____ cm   (50 or 5 or 55)

e. 5 m = _____ cm   (5 or 50 or 500)

f. 200 cm = _____ m   (2 or 20 or 200)

g. _____ cm = 60 mm   (600 or 6 or 60)

h. _____ mm = 7 cm   (7 or 70 or 700)

---

7 Complete.

a. 7 cm = _____ mm   **b.** 3 cm = _____ mm

c. 4 m = _____ cm   **d.** 8 m = _____ cm

e. 18 cm = _____ mm   **f.** 50 cm = _____ mm

g. _____ m = 500 cm   **h.** 300 cm = _____ m

i. _____ cm = 40 mm   **j.** 200 mm = _____ cm

k. 10 cm = _____ mm   **l.** 10 mm = _____ cm

m. 2 cm + 5 cm = _____ mm   **n.** 4 cm + 2 cm = _____ mm

o. 5 m + 3 m = _____ cm   **p.** 4 m + 2 m = _____ cm

q. 70 mm + 10 mm = _____ cm   **r.** 20 mm + 70 mm = _____ cm

s. 350 cm = _____ m + _____ cm   **t.** 75 mm = _____ cm and _____ mm

---

8 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. 1 m = 100 cm   (   )   **b.** 90 mm = 9 cm   (   )

c. 30 cm = 300 mm   (   )   **d.** 500 cm = 50 m   (   )

e. 1 cm and 2 mm = 12 mm   (   )   **f.** 2 m + 6 m = 800 mm   (   )

9 Complete using "> , = or <".

a. 5 m ☐ 5 cm

b. 20 mm ☐ 2 cm

c. 40 mm ☐ 9 cm

d. 7 cm ☐ 20 mm

e. 6 cm ☐ 6 mm

f. 20 cm ☐ 200 mm

g. 9 mm ☐ 9 m

h. 1 m ☐ 100 cm

i. 1 cm ☐ 100 mm

j. 20 mm ☐ 200 cm

k. 600 mm ☐ 6 cm

l. 30 mm + 20 mm ☐ 50 cm

m. 3 cm and 3 mm ☐ 303 mm

n. 56 mm ☐ 50 cm + 6 mm

Challenge
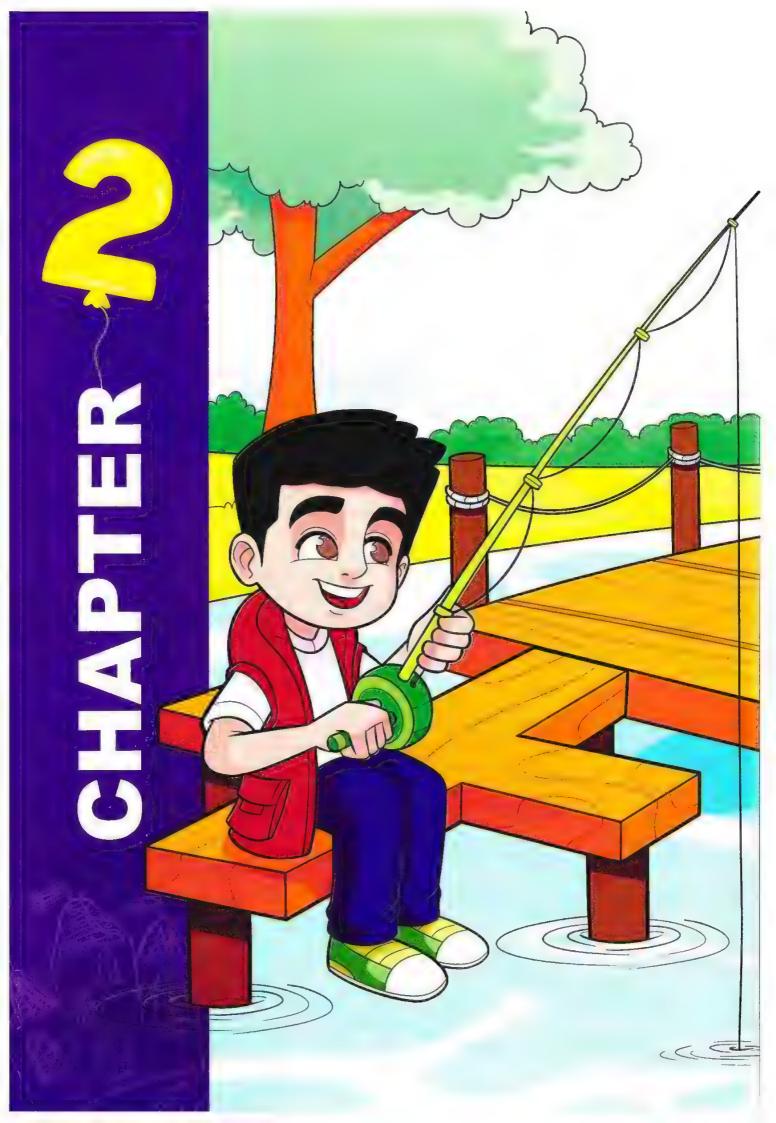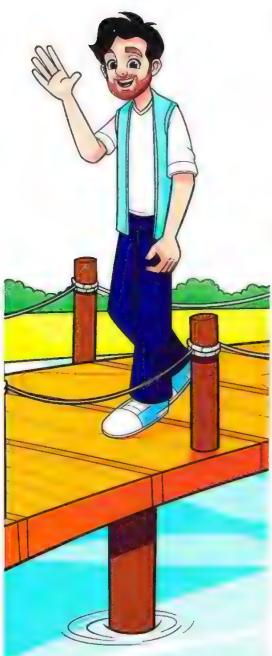
10 Ring the longest length.

90 mm   88 cm   100 mm   90 cm

11 Complete.

a. 4 cm + _____ mm = 70 mm

b. 10 mm + _____ mm = 3 cm

c. 90 mm – _____ mm = 2 cm

d. 8 cm – _____ cm = 20 mm

e. 5 m – _____ cm = 300 cm

f. _____ m + 40 cm = 540 cm

Place a smiley face

43

Outcomes of chapter two :

At the end of chapter two, your child will be able to:

▶ **Lessons 1 & 2 :**
- **Thousands**
- **More of Thousands**
- Explain how the value of a digit can change based on its place value.
- Apply strategic thinking to construct a four-digit number with a high value.
- Read and write numbers up to the Thousands place in standard form.
- Read and write numbers up to the Thousands place in expanded form.
- Create visual models of numerical value.
- Compare numbers using symbols.

▶ **Lessons 3 & 4 :**
- **Ten Thousands – Hundred Thousands**
- **Numbers in different forms**
- Read and write numbers up to the Hundred Thousands place.
- Compare and order numbers up to the Hundred Thousands place.
- Skip count by 2s, 3s, 5s, or 10s.
- Read and write numbers up to the Hundred Thousands place in standard form.
- Read and write numbers up to the Hundred Thousands place in expanded form.
- Order a series of numbers up to the Hundred Thousands place.

▶ **Lesson 5 :**
- **Arrays**
- Use a variety of strategies to calculate the total number of items in an array.
- Solve repeated addition problems.

▶ **Lesson 6 :**
- **Multiplication**
- Compare arrays to equal groups.
- Explain how repeated addition and multiplication equations are related.
- Explain products of whole numbers.
- Compare two products using greater than, less than, and equal to symbols.

▶ **Lesson 7 :**
- **Commutative property in multiplication**
- Solve multiplication problems using arrays.
- Investigate the Commutative Property of Multiplication using arrays.
- Create arrays to model the Commutative Property of Multiplication.
- Explain multiplication and the Commutative Property of Multiplication.
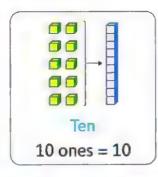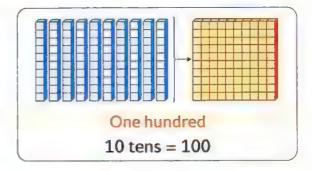
Learn 1 Exploring thousands
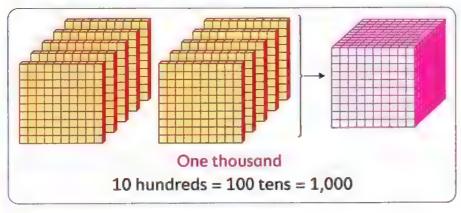
One	**Ten** 10 ones = 10	**One hundred** 10 tens = 100

One thousand
10 hundreds = 100 tens = 1,000
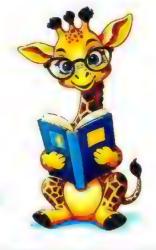
> **Math tip**
> A comma (,) is used to separate the thousands and the hundreds.

Generally :

○ 2,000 (two thousands) = 20 hundreds = 200 tens.

○ 3,000 (three thousands) = 30 hundreds = 300 tens.

Remarks

○ 9 is the greatest 1-digit number
  10 is the smallest 2-digit number $9 + 1 = \textbf{10}$

○ 99 is the greatest 2-digit number
  100 is the smallest 3-digit number $99 + 1 = \textbf{100}$

○ 999 is the greatest 3-digit number
  1,000 is the smallest 4-digit number $999 + 1 = \textbf{1,000}$
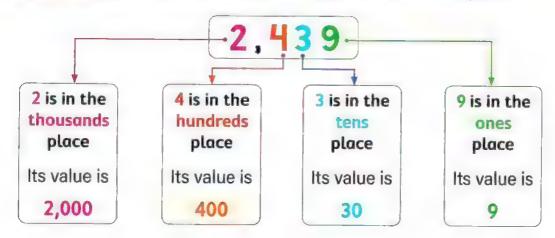
Notes for parents

• Let your child know another way to find one thousand is adding one to 999 ones (999 + 1 = 1,000).

📝 Learn 2 The place value

○ The **value** of each digit in any number depends on its **place** in this number.

Example : Notice the value of each digit in the number 2,439

2 , 4 3 9

2 is in the thousands place	4 is in the hundreds place	3 is in the tens place	9 is in the ones place
Its value is **2,000**	Its value is **400**	Its value is **30**	Its value is **9**

How do you write and read 4-digit numbers ?

○ **Place value chart :**

2 , 4 3 9

Thousands	Hundreds	Tens	Ones
2	4	3	9
2,000	400	30	9

○ **Place value mat :**

Thousands	Hundreds	Tens	Ones
2	4	3	9

Math tip

The expanded form is adding the value of each digit in the number

○ **Standard form :** 2, 4 3 9

○ **Expanded form :** 2,000 + 400 + 30 + 9

○ **Word form :** Two thousand, four hundred thirty-nine

• Help your child use the expanded form as a way to read the number for example :
  (2,000 + 600 + 30 + 4) is read as two thousand, six hundred thirty-four.

Example ①

Write the place value and the value of the colored digit.

		Place value	Value				Place value	Value
a.	5,839			b.	7,282			
c.	2,106			d.	5,018			

Solution ✓

		Place value	Value				Place value	Value
a.		Thousands	5,000	b.			Tens	80
c.		Ones	6	d.			Hundreds	0

Example ②

Write each of the following in standard form.

a. 4,000 + 500 + 60 + 7 = _____

b. 7,000 + 400 + 8 = _____

c. 50 + 9 + 6,000 = _____

d. 8,000 + 60 = _____

e. Three thousand, five hundred thirteen = _____

f. 9 thousands, 5 hundreds and 8 ones = _____

Solution ✓

a. 4,567

b. 7,408

c. 6,059

d. 8,060

e. 3,513

f. 9,508

Example ③

Complete.

a. 5,000 = _____ thousands

b. 7,000 = _____ hundreds

c. 8,000 = _____ tens

d. 40 hundreds = _____ thousands

e. 900 tens = _____ hundreds

f. _____ = 500 tens

Notes for parents

• Ask your child to choose any number from this page and write it in another way.

Solution ✓

a. 5

b. 70

c. 800

d. 4

e. 90

f. 5,000

Check 🔍

1. Choose the correct answer.

a. The value of the digit 4 in the number 5,430 is _____

    A. 4   **B.** 40   **C.** 400   **D.** 4,000

b. The place value of the digit 3 in the number 3,506 is _____

    A. Ones   **B.** Tens   **C.** Hundreds   **D.** Thousands

c. The value of the digit 0 in the number 9,502 is _____

    A. 0   **B.** 10   **C.** 100   **D.** Tens

d. $7,000 + 500 + 2 =$ _____

    A. 752   **B.** 7,250   **C.** 7,502   **D.** 7,520

e. 8 thousands, 6 tens and 3 ones = _____

    A. 863   **B.** 8,063   **C.** 8,603   **D.** 8,630

f. Three thousand, six hundred seven = _____

    A. 367   **B.** 3,067   **C.** 3,607   **D.** 3,670

2. Complete.

a. 3,000 = _____ thousands

b. 2,000 = _____ tens

c. 4 thousands = _____ tens
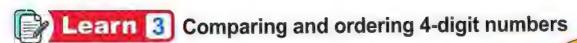
d. _____ = 6 thousands

e. 1,000 = _____ ones

f. 600 tens = _____ hundreds

g. _____ = 700 tens

h. _____ = 8,000 ones

i. 20 hundreds = _____ thousands

j. _____ hundreds = 3 thousands

• Let your child remember that : the value of each digit in any number depends on its place in this number.   49

Learn 3 Comparing and ordering 4-digit numbers

- **How do you compare 4-digit numbers ?**

Compare 4,593 and 176

- 4,593 has more digits than 176

So, 4,593 is greater than 176

4,593 > 176

When comparing numbers, the number which has more number of digits is the greater.

Compare 3,462 and 3,489

- 3,462 and 3,489 have the same number of digits, so :

First : Compare the thousands digits →	**Second : Compare the hundreds digits** →	**Third : Compare the tens digits**
3, 4 6 2	3, 4 6 2	3, 4 6 2
3, 4 8 9	3, 4 8 9	3, 4 8 9
The digits are the same	The digits are the same	6 < 8

So, 3,462 is smaller than 3,489

3,462 < 3,489

- **How to create the greatest and the least 4-digit number ?**

The digits are ④ , ⑤ , ⑨ and ①

To create the greatest 4-digit number from given digits, arrange the digits from greatest to least.

The order is : ⑨⑤④①

So, the greatest number is : **9,541**

To create the least 4-digit number from given digits, arrange the digits from least to greatest.

The order is : ①④⑤⑨

So, the least number is : **1,459**

Hint :

Do not put the 0 digit in the highest place value. It will be 3-digit number.

For example :
- The greatest 4-digit number formed from 6 , 7 , 0 , 1 is **7,610**
- The least 4-digit number formed from 6 , 7 , 0 , 1 is **1,067**

Notes for parents
- Ask your child to tell you a number greater than 4,321 and another number less than 8,765.
- Ask your child to explore the greatest 4-digit number. (he/she should answer : 9,999).
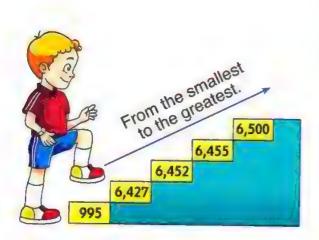
Ordering numbers

ASCENDING

Ascending order is ordering numbers from the smallest to the greatest.

• **For example :**

From the smallest to the greatest.

6,500
6,455
6,452
6,427
995
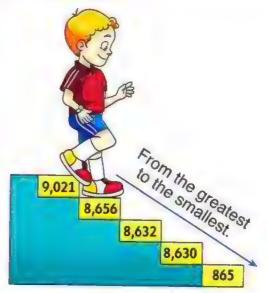
995 , 6,427 , 6,452 , 6,455 and 6,500 are arranged in **an ascending order**.

DESCENDING

Descending order is ordering numbers from the greatest to the smallest.

• **For example :**

From the greatest to the smallest.

9,021
8,656
8,632
8,630
865

9,021 , 8,656 , 8,632 , 8,630 and 865 are arranged in **a descending order**.

Check

1. Compare, write "> , < or =".

   a. 3,251 ◯ 3,251

   b. 7,365 ◯ 7,356

   c. 2,800 ◯ 999

   d. 30 hundreds ◯ 3,000

2. Write the greatest and the smallest number formed from the digits : 7 , 2 , 5 and 1

   • The greatest : _____   • The smallest : _____

3. Arrange the following numbers in an ascending order.

   7,351   3,751   1,753   5,173 → _____ , _____ , _____ , _____

4. Arrange the following numbers in a descending order.

   1,111   999   1,000   1,023 → _____ , _____ , _____ , _____

• Help your child know that : 4-digit number is greater than 3-digit number.
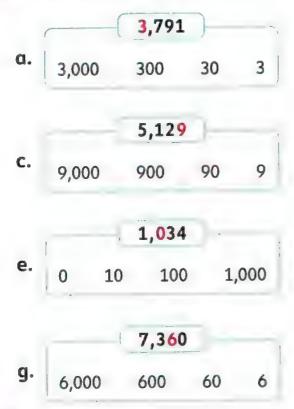
- **Thousands**
- **More of Thousands**
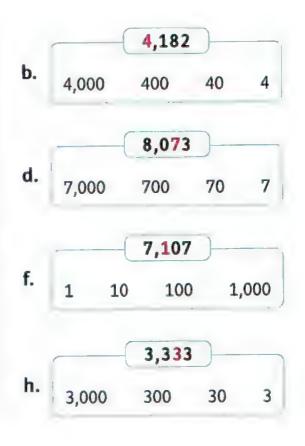
📖 From the school book

1 Complete the table.

	Number	Thousands	Hundreds	Tens	Ones
a.	5,839				
b.	7,256				
c.	2,103				
d.	4,360				
e.	5,018				
f.	918				

2 Circle the value of the red digit.

a. **3,791**

| 3,000 | 300 | 30 | 3 |

b. **4,182**

| 4,000 | 400 | 40 | 4 |

c. **5,129**

| 9,000 | 900 | 90 | 9 |

d. **8,073**

| 7,000 | 700 | 70 | 7 |

e. **1,034**

| 0 | 10 | 100 | 1,000 |

f. **7,107**

| 1 | 10 | 100 | 1,000 |

g. **7,360**

| 6,000 | 600 | 60 | 6 |

h. **3,333**

| 3,000 | 300 | 30 | 3 |

3 Write the place value and the value of the colored digit.

	place value	value			place value	value
a. 3,791				b. 6,129		
c. 4,182				d. 8,063		
e. 5,629				f. 1,034		
g. 7,107				h. 2,560		
i. 5,431				j. 9,287		
k. 3,030				l. 2,222		

4 Write the following numbers in expanded form.

a. 3,284 = _____ + _____ + _____ + _____

b. 5,123 = _____ + _____ + _____ + _____

c. 9,856 = _____ + _____ + _____ + _____

d. 8,032 = _____ + _____ + _____

e. 7,504 = _____ + _____ + _____

f. 6,800 = _____ + _____

g. 4,001 = _____ + _____

5 Write in standard form.

a. $2,000 + 600 + 30 + 4 =$ _____

b. $1 + 70 + 800 + 6,000 =$ _____

c. $4,000 + 500 + 90 + 3 =$ _____

d. $3,000 + 300 + 9 =$ _____

e. $20 + 1 + 6,000 =$ _____

f. $10 + 100 + 1,000 =$ _____

g. $600 + 7,000 + 50 =$ _____

h. $5 + 9,000 =$ _____

i. $1,000 + 900 =$ _____

j. $5,000 + 40 =$ _____

---

6 Write in expanded form and standard form.

a. 8 thousands , 4 hundreds , 9 tens and 1 one
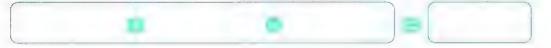
b. 2 thousands , 1 hundred , 7 tens and 5 ones

c. 7 ones , 5 hundreds , 3 thousands and 2 tens

d. 9 thousands , 7 hundreds and 2 ones

e. 1 thousand and 48 ones

f. 5 hundreds, 4 thousands and 3 ones

g. 7 hundreds, 5 thousands and 16 ones

h. 4 tens, 3 thousands and 6 ones

7 Write the missing numbers.

a. $2{,}753 = $ _____ $+ 700 + 50 + 3$

b. _____ $= 3{,}000 + 3$

c. $4{,}925 = 4{,}000 + 900 + $ _____ $+ $ _____

d. $6{,}040 = 6{,}000 + $ _____

e. $9{,}462 = 9{,}000 + $ _____ $+ 60 + 2$

f. $7{,}777 = 7 + $ _____ $+ $ _____ $+ $ _____

g. $3{,}781 = 1 + $ _____ $+ 700 + $ _____

h. $4{,}506 = $ _____ $+ 500 + $ _____

i. $7{,}649 = $ _____ thousands + _____ hundreds + _____ tens + _____ ones

j. $5{,}302 = $ _____ thousands + _____ hundreds + _____ tens + _____ ones

8 Write the following in standard form.

a. Five thousand, three hundred seventy-eight

b. Two thousand, five hundred thirty-one

c. Nine thousand, four hundred six

d. One thousand, fifty-four

e. Three thousand, two

f. Four thousand, forty

g. Two thousand, seventeen

h. Eight thousand, five hundred

9 Write the following in the word form.

a. 3,751 _____

b. 4,004 _____

c. 7,200 _____

d. 6,510 _____

e. 5,000 + 300 + 10 + 7 _____

f. 8,000 + 80 _____

g. 5 thousands , 3 hundreds and 26 ones _____

h. 2 thousands and 2 tens _____

10 Complete.

a. 6,000 = _____ thousands.

b. 2,000 = _____ hundreds.

c. 7,000 = _____ tens.

d. 80 hundreds = _____ thousands.

e. 500 tens = _____ thousands.

f. 900 tens = _____ hundreds.

g. 30 hundreds = _____ tens.

h. _____ tens = 8 hundreds.

i. _____ = 4,000 ones.

j. _____ = 800 tens.

k. 4 thousands = _____ hundreds.

l. 8 thousands = _____ tens.

11 Compare, write "> , < or =".

a. 3,291 ◯ 3,591

b. 📖 8,903 ◯ 9,038

c. 📖 6,534 ◯ 6,544

d. 📖 1,342 ◯ 1,302

e. 711 ◯ 7,110

f. 2,691 ◯ 948

g. 📖 2,345 ◯ 2,344

h. 📖 7,878 ◯ 7,787

i. 8,651 ◯ 1 + 50 + 600 + 8,000

j. 3,000 + 300 + 30 ◯ 3,333

k. 9,205 ◯ Nine thousand, two hundred fifty.

l. 5,168 ◯ 5 thousands + 1 hundred + 6 tens + 7 ones

m. 9 thousands , 2 hundreds and 5 ones ◯ 9,000 + 200 + 50

n. 6 thousands ◯ 60 hundreds

o. 90 tens ◯ 9 hundreds

---

12 Write the greatest and the least 4-digit number from the given digits.

	Digits	Greatest 4-digt number	Least 4-digit number
a.	4 , 3 , 9 , 8	_____	_____
b.	5 , 2 , 3 , 4	_____	_____
c.	5 , 1 , 6 , 8	_____	_____
d.	4 , 4 , 7 , 5	_____	_____
e.	3 , 0 , 2 , 7	_____	_____
f.	0 , 3 , 4 , 9	_____	_____

13 Write the numbers in an ascending order.

a. 6,987   6,978   7,896   987

The order is : _____ , _____ , _____ , _____

b. 4,782   3,521   9,835   5,336

The order is : _____ , _____ , _____ , _____

c. 1,281   993   4,621   6,170   2,990

The order is : _____ , _____ , _____ , _____ , _____

d. 4,279   7,942   784   4,278   7,249

The order is : _____ , _____ , _____ , _____ , _____

---

14 Write the numbers in a descending order.

a. 5,300   1,050   1,500   3,805

The order is : _____ , _____ , _____ , _____

b. 7,321   941   6,541   9,541

The order is : _____ , _____ , _____ , _____

c. 456   1,938   2,605   5,719   3,010

The order is : _____ , _____ , _____ , _____ , _____

d. 5,441   6,204   2,917   708   3,009

The order is : _____ , _____ , _____ , _____ , _____

15 Complete.

a. The place value of the digit 6 in the number 5,632 is _____

b. The value of the digit 9 in the number 9,304 is _____

c. The greatest 4-digit number is _____

d. The smallest 4-digit number is _____

e. The greatest 4-different digit number is _____

f. The smallest 4-different digit number is _____

g. The smallest 4-same digit number is _____ .

h. The greatest 4-digit even number is _____

16 Put (✓) to the correct statement or (X) to the incorrect statement.

a. 30 hundreds = 3 thousands   (   )

b. The place value of the digit 7 in the number 7,469 is Thousands   (   )

c. The value of the digit 5 in the number 5,367 is 500   (   )

d. $9,000 + 40 + 500 + 6 = 9,456$ (   )

e. $7,465 > 7,456$ (   )

f. 2,409 = 2 thousands, 4 hundreds and 9 tens   (   )

g. The smallest 4-digit number formed from 9 , 6 , 0 and 3 is 369   (   )

Challenge

17 By using the digits 5 , 3 , 2 and 4
Form 3-different numbers each of them is greater than 5,000

_____

18 What does 23 hundreds and 19 ones equal ? _____

Place a smiley face

- **Ten Thousands - Hundred Thousands**
- **Numbers in different forms**

Learn   5-digit and 6-digit numbers

- **How do you write and read 5-digit numbers in different forms ?**
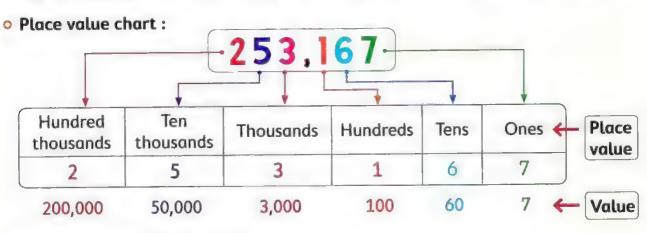
  ○ Place value chart :

  5 3 , 1 6 7

Ten thousands	Thousands	Hundreds	Tens	Ones	← Place value
5	3	1	6	7	
50,000	3,000	100	60	7	← Value

  ○ **Standard form :** 5 3, 1 6 7

  ○ **Expanded form :** 50,000 + 3,000 + 100 + 60 + 7

  ○ **Word form :** Fifty-three thousand, one hundred sixty-seven

- **How do you write and read 6-digit numbers in different forms ?**

  ○ Place value chart :

  2 5 3 , 1 6 7

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones	← Place value
2	5	3	1	6	7	
200,000	50,000	3,000	100	60	7	← Value

  ○ **Standard form :** 2 5 3, 1 6 7

  ○ **Expanded form :** 200,000 + 50,000 + 3,000 + 100 + 60 + 7

  ○ **Word form :** Two hundred fifty-three thousand, one hundred sixty-seven

Notes for parents
- Let your child discover what is the result of adding.
  1 to 9,999 (10,000) and adding 1 to 99,999 (100,000).

Example ①

Write the place value and the value of the colored digit.

	Number	Place value	Value
a.	34,761	_____	_____
b.	259,613	_____	_____
c.	84,179	_____	_____
d.	256,341	_____	_____

Solution ✓

a. Ten thousands / 30,000

b. Hundred thousands / 200,000

c. Thousands / 4,000

d. Hundreds / 300

Example ②

Write each of the following in standard form.

a. $300,000 + 50,000 + 4,000 + 900 + 80 + 1 =$ _____

b. $70,000 + 7,000 + 7 =$ _____

c. $300 + 1,000 + 40,000 + 60 + 700,000 =$ _____

d. Two hundred sixty-five thousand , one hundred seventeen = _____

e. Forty-one thousand , five hundred six = _____

Solution ✓

a. 354,981

b. 77,007

c. 741,360

d. 265,117

e. 41,506

Check 🔍

Complete.

a. The place value of the digit 4 in the number 341,698 is _____

b. The value of the digit 7 in the number 716,409 is _____

c. The value of the digit 2 in the number 24,690 is _____

d. The place value of the digit 5 in the number 576,321 is _____

e. $900 + 30,000 + 600,000 + 4 =$ _____

f. 7 ten thousands + 4 thousands + 6 hundreds + 2 ones = _____

• Ask your child to discover the greatest and the least 5-digit numbers (his/her answer should be : 99,999 & 10,000)

• Also the greatest and the least 6-digit numbers (his/her answer should be : 999,999 & 100,000)
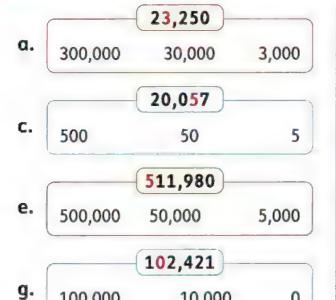
• **Ten Thousands - Hundred Thousands**
• **Numbers in different forms**

From the school book

1 Circle the correct digit in the number according to its place.

a.	Ten thousands	65,810	b.	Hundred thousands	308,001
c.	Hundred thousands	921,348	d.	Hundreds	200,720
e.	Thousands	102,421	f.	Tens	31,065
g.	Ones	85,609	h.	Ten thousands	407,105

2 Circle the value of the red digit.

a. **23,250**
300,000   30,000   3,000

b. **85,142**
800,000   80,000   8,000

c. **20,057**
500   50   5

d. **33,221**
20,000   2,000   200

e. **511,980**
500,000   50,000   5,000

f. **498,107**
900,000   90,000   9,000

g. **102,421**
100,000   10,000   0

h. **371,056**
100,000   10,000   1,000

3 Write the place value and the value of the colored digit.

	place value	value		place value	value
a. **69,284**			b. **481,206**		
c. **730,460**			d. **156,392**		
e. **24,378**			f. **40,520**		
g. **320,045**			h. **501,483**		
i. **59,730**			j. **78,029**		

4 Complete.

a. The place value of the digit 5 in the number 513,627 is _____

b. The value of the digit 7 in the number 764,210 is _____

c. The place value of the digit 0 in the number 904,362 is _____

d. The value of the digit 0 in the number 904,362 is _____

e. The digit which represents the ten thousand in the number 356,217 is _____

f. The digit which represents the hundred thousand in the number 598,631 is _____

g. If the value of a digit is 500,000, then its place value is _____

h. If the value of a digit is 30,000, then its place value is _____

5 Write the following in standard form.

a. Thirty-one thousand, five hundred seventy-four = _____

b. Two hundred seventy-eight thousand, six hundred twenty-one = _____

c. Three hundred eight thousand, ten = _____

d. 5 hundred thousands , 4 thousands and 3 tens = _____

e. 9 ten thousands , 7 thousands , 2 hundreds and 5 ones = _____

f. 3 hundred thousands + 3 ten thousands + 3 hundreds = _____

g. 30,000 + 9,000 + 400 + 10 + 5 = _____

h. 60,000 + 8,000 + 90 + 2 = _____

i. 8 + 20 + 900 + 300,000 = _____

j. 500,000 + 500 + 5 = _____

6 Write in expanded form.

    a. 95,683 = _____ + _____ + _____ + _____ + _____

    b. 543,876 = _____ + _____ + _____ + _____ + _____ + _____

    c. 📖 62,319 = _____ + _____ + _____ + _____ + _____

    d. 📖 762,319 = _____ + _____ + _____ + _____ + _____ + _____

    e. 📖 15,780 = _____

    f. 230,045 = _____

    g. 70,116 = _____

    h. 📖 812,004 = _____

    i. 400,040 = _____

---

7 Write the missing numbers.

    a. 95,683 = _____ + 5,600 + 80 + 3

    b. 531,497 = _____ + 30,000 + _____ + 400 + 97

    c. 78,465 = 65 + 400 + _____ + 70,000

    d. 43,092 = 2 + 90 + _____ + 3,000

    e. 670,341 = _____ + 70,000 + 340 + _____

    f. 102,637 = _____ + _____ + 600 + 30 + 7

    g. _____ = 200,000 + 10,000 + 564

    h. _____ = 30,000 + 5,000 + 29   **i.** _____ = 25,000 + 798

    j. _____ = 900,000 + 5,000 + 17   **k.** _____ = 16,000 + 400 + 39

8 Write the following in the word form.

a. 235,791 _____

b. 904,006 _____

c. 71,071 _____

d. 60,606 _____

e. 700,000 + 40,000 + 6,000 + 90 _____

f. 50,000 + 4,000 + 300 + 20 + 9 _____

g. 7 hundred thousands, 9 thousands and 5 tens _____

h. 8 ten thousands, 6 hundreds and 36 ones _____

9 Match.

a. The value of the digit 5 in the number 351,267

b. The place value of the digit 5 in the number 576,423

c. The place value of the digit 5 in the number 157,630

d. The value of the digit 5 in the number 521,679

e. 5,000 + 500,000 + 5 + 50

f. 500,000 + 50,000 + 500 + 50

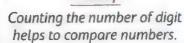Hundred thousands

50,000

500,000

Ten thousands

550,550

505,055

10 Compare, write ">, < or =".

a. 48,047 ◯ 49,123

b. 175,362 ◯ 175,290

c. 322,647 ◯ 322,467

d. 321,054 ◯ 83,266

e. 526,540 ◯ 526,550

f. 50,320 ◯ 50,410

g. 15,000 ◯ 150 hundreds

h. 7,500 hundreds ◯ 750 thousands

i. 99,999 ◯ one hundred thousand

j. 301,013 ◯ Three hundred one thousand, thirteen

k. 275,600 ◯ 200,000 + 70,000 + 5,000 + 6

l. 111,111 ◯ 99,999

m. 555,301 ◯ 555,310

n. 99,999 + 1 ◯ 100,000

o. 30 hundreds ◯ 30 thousands

p. The greatest number formed from 5 digits ◯ The smallest number formed from 6 digits

q. 72,000 + 345 ◯ 70,000 + 2,300 + 45

11 Rearrange the digits to get the greatest and the least number.

Remember

Do not put the 0 digit in the highest place value.

a. [7] [3] [6] [2] [8]

greatest _____ least _____

b. [6] [2] [3] [8] [1] [4]

greatest _____ least _____

c. [7] [2] [1] [0] [9]

greatest _____ least _____

d. [2] [0] [3] [5] [6] [1]

greatest _____ least _____

e. [0] [7] [8] [0] [4]

greatest _____ least _____

f. [5] [9] [7] [0] [1] [3]

greatest _____ least _____

g. [2] [4] [7] [5] [1] [9]

greatest _____ least _____

h. [1] [9] [0] [7] [1] [3]

greatest _____ least _____

12 Write the numbers in order from least to greatest.

a. | 11,493 | | 132,567 | | 9,372 | | 98,505 |

The order is : _____ , _____ , _____ , _____

b. | 125,762 | | 27,652 | | 152,567 | | 27,256 |

The order is : _____ , _____ , _____ , _____

c. | 833,322 | | 833,400 | | 8,339 | | 83,987 | | 83,986 |

The order is : _____ , _____ , _____ , _____ ,

d. | 965,852 | | 932,599 | | 965,478 | | 93,259 | | 96,547 |

The order is : _____ , _____ , _____ , _____ ,

e. | 24,571 | | 724,072 | | 4,720 | | 24,270 | | 724,172 |

The order is : _____ , _____ , _____ , _____ ,

f. | 999,999 | | 111,111 | | 100,000 | | 102,345 | | 987,654 |

The order is : _____ , _____ , _____ , _____ , _____

---

13 Write the numbers in order from greatest to least.

a. | 103,002 | | 3,201 | | 23,001 | | 21,300 |

The order is : _____ , _____ , _____ , _____

b. | 11,112 | | 101,559 | | 59,002 | | 21,052 |

The order is : _____ , _____ , _____ , _____

c. | 81,236 | | 618,765 | | 38,472 | | 637,961 | | 773,550 |

The order is : _____ , _____ , _____ , _____ ,

d.

| 914,231 | 12,605 | 9,380 | 12,606 | 914,230 |

The order is : _____ , _____ , _____ , _____ , _____

e.

| 500,000 | 99,999 | 100,000 | 500,007 | 3,428 |

The order is : _____ , _____ , _____ , _____ , _____

---

14 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. The greatest number formed from the digits 2 , 7 , 5 , 9 , 0 and 6 is 907,652 (   )

b. The smallest number formed from the digits 2 , 4 , 6 , 5 and 1 is 12,456   (   )

c. The greatest 6-digit number is 999,999   (   )

d. The smallest 6-different digit number is 123,456   (   )

e. The greatest 5-different digit number is 987,654   (   )

f. The smallest 5-digit number is 11,111   (   )

g. The place value of the circled digit in the number ⑦5,621 is
Hundred thousands   (   )

h. The value of the circled digit in the number ⑦52,634 is 700,000   (   )

---

15 Circle the numbers which is greater than 200,000

99,999   716,012   50,214   321,000   200,100

---

16 Circle the numbers which is smaller than 33,000

111,111   200,000   20,000   13,699   9,216

Challenge 🎯

17 Complete.

If the place value of a digit is ten thousands, then its value has _____ zeroes.

---

18 Write a number which is greater than 45,387 and having the digits : _Place a smiley face_

①②⓪⑨③

Arrays

Learn

○ Arrays have horizontal rows and vertical columns.

○ In this array :

    - Number of rows : **3**

    - Number of columns : **4**

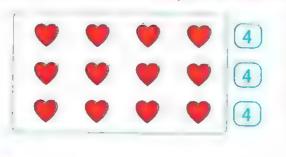row ◄ ......

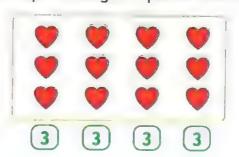column

    - You can write : (**3 rows of 4**) or **4 columns of 3**

How to find the total number of objects using repeated addition?

To find the total number of objects in an array use skip counting or repeated addition.

4
4
4

3   3   3   3

First Skip counting to find the total number of array

○ This array has 3 rows of 4 hearts.

○ Skip counting by 4s three times : 4 , 8 , 12 hearts.

○ This array has 4 columns of 3 hearts.

○ Skip counting by 3s four times : 3 , 6 , 9 , 12 hearts.

Second Repeated addition to find the total number of array

○ Number of rows = 3

○ Number of hearts in each row = 4

○ Total number of hearts =

$$4 + 4 + 4 = 12$$

○ Number of columns = 4

○ Number of hearts in each column = 3

○ Total number of hearts =
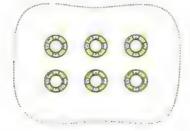
$$3 + 3 + 3 + 3 = 12$$

Notes for parents

• Tell your child that repeated addition and skip counting are not the only strategies to find the total.

Write the repeated addition and skip counting steps to find the total of each of the following.
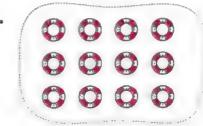
a.

Repeated addition : _____

Skip counting : _____

b.

Repeated addition : _____

Skip counting : _____

c.

Repeated addition : _____

Skip counting : _____

d.

Repeated addition : _____

Skip counting : _____

e.

Repeated addition : _____

Skip counting : _____

f.

Repeated addition : _____

Skip counting : _____
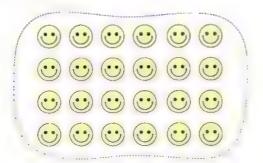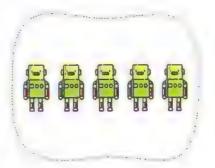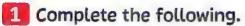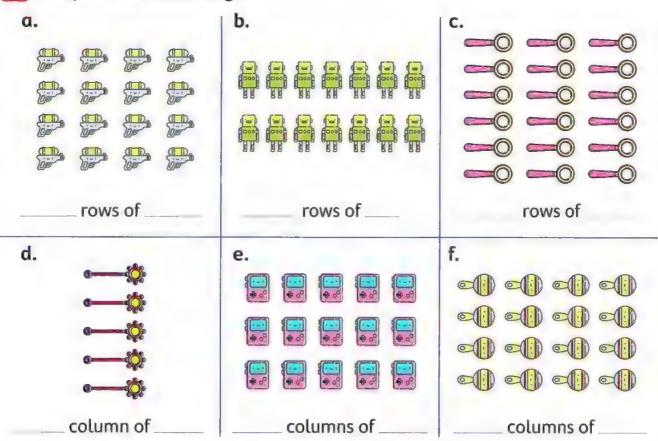
Notes for parents
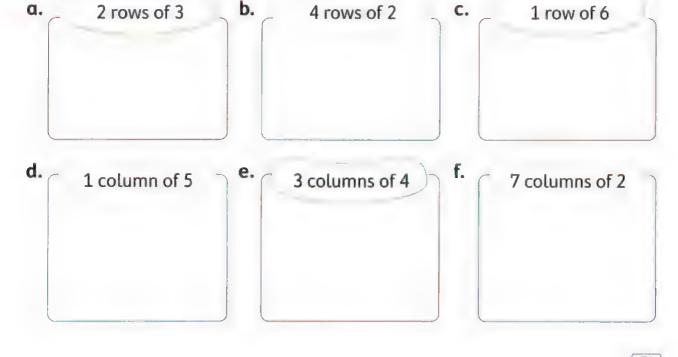• Remind your child that rows are horizontal and go across but columns are vertical and go up and down.

Arrays

1 **Complete the following.**

a.

_____ rows of _____

b.

_____ rows of _____

c.

rows of

d.

_____ column of _____

e.

_____ columns of _____

f.

_____ columns of _____

2 **Create an array.**

a. 2 rows of 3

b. 4 rows of 2

c. 1 row of 6

d. 1 column of 5

e. 3 columns of 4

f. 7 columns of 2
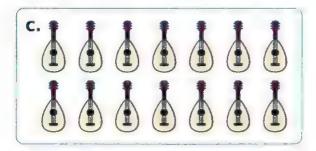
3 Find the total items of each array using skip counting strategy.

a.

The total = _____

b.

The total = _____

c.

The total = _____

d.
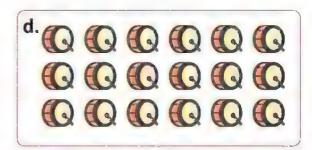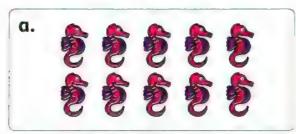
The total = _____
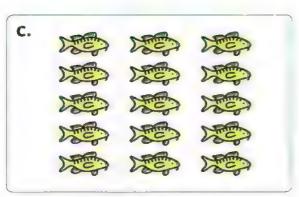
4 Look at each array. Complete.
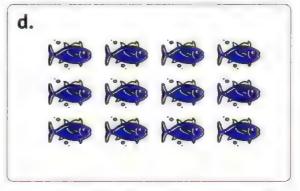
a.

_____ equal rows _____ in each row
_____ in all.

b.

_____ equal columns _____ in each
column _____ in all.

c.

_____ equal rows _____ in each row
_____ in all.

d.
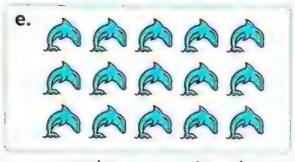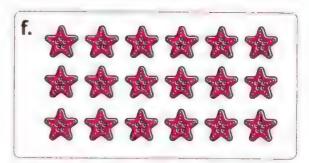
_____ equal columns _____ in each
column _____ in all.

e. _____ equal rows _____ in each row _____ in all.

f. _____ equal columns _____ in each column _____ in all.
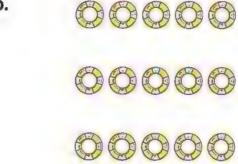
5 Complete the following.

a. 📖

- Number of rows = _____
- Number of stars in each row = _____
- Total number of items = _____

b.

- Number of columns = _____
- Number of items in each column = _____
- Total number of items = _____

c.

- Number of rows = _____
- Number of items in each row = _____
- Total number of items = _____

d. 📖

- Number of columns = _____
- Number of stars in each column = _____
- Total number of stars = _____

6 Write the repeated addition and skip counting steps to find the total.
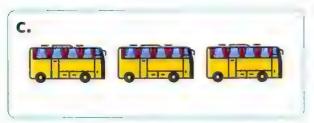
a.

Repeated addition : _____

Skip counting : _____

b.

Repeated addition : _____

Skip counting : _____

c.

Repeated addition : _____

Skip counting : _____

d.

Repeated addition : _____

Skip counting : _____

e.

Repeated addition : _____

Skip counting : _____

f.
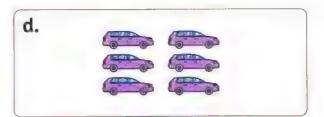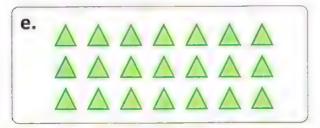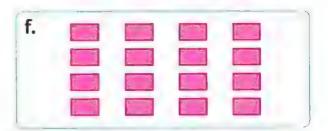
Repeated addition : _____

Skip counting : _____

Challenge

7 📖 Look at the opposite star array.
Some of the stars have been ripped off.
How many stars were in the original array ?
Explain your thinking using pictures, numbers, or words.

Place a smiley face

Multiplication

Learn 1 Multiplication as repeated addition

○ There are 3 equal groups of 5 flowers

> Equal groups are groups that have the same number of items.

> Remember

5   5   5
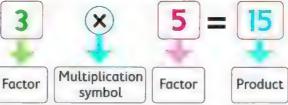
○ You can use **repeated addition** to find the total.

$$5 + 5 + 5 = 15$$ Addition sentence

○ When you put together equal groups, you can also use **multiplication**

What you write : 3 × 5 = 15 Multiplication sentence

Factor | Multiplication symbol | Factor | Product

- *Factor* one of the numbers multiplied.
- *Product* the number obtained when multiplying.

What you say : 3 times 5 equals 15

Example 1

Write an addition sentence and a multiplication sentence to find the total.

a.

- Repeated addition : — + — + — = —
- Multiplication : — × — = —

b.

- Repeated addition : — + — + — + — = —
- Multiplication : — × — = —

Notes for parents

- Use small objects. Ask your child to make 2 groups of 6. Then have your child write an addition sentence and a multiplication sentence.

Solution ✓

a. Repeated addition : $2 + 2 + 2 = 6$

Multiplication : $3 \times 2 = 6$

b. Repeated addition : $3 + 3 + 3 + 3 = 12$

Multiplication : $4 \times 3 = 12$

Example ②

Complete.

a. $2 + 2 + 2 + 2 + 2 = \underline{} \times 2 = \underline{}$

b. $5 + 5 + 5 + 5 = 4 \times \underline{} = \underline{}$

c. $3 \times 7 = \underline{} + \underline{} + \underline{} = \underline{}$

d. $\underline{} \times 4 = 4 + 4 + 4 + 4 + 4 = \underline{}$

Solution ✓

a. $2 + 2 + 2 + 2 + 2 = 5 \times 2 = 10$

b. $5 + 5 + 5 + 5 = 4 \times 5 = 20$

c. $3 \times 7 = 7 + 7 + 7 = 21$
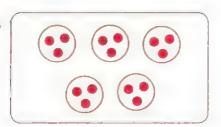
d. $5 \times 4 = 4 + 4 + 4 + 4 + 4 = 20$

Check 🔍

Write an addition sentence and a multiplication sentence to find the total.
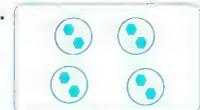
a.

- Repeated addition :

$\underline{} + \underline{} + \underline{} + \underline{} = \underline{}$

- Multiplication : $\underline{} \times \underline{} = \underline{}$

b.

- Repeated addition :

$\underline{} + \underline{} + \underline{} + \underline{} = \underline{}$

- Multiplication : $\underline{} \times \underline{} = \underline{}$

Notes for parents
- Ask your child to compare the addition sentence and the multiplication sentence and compare the sum and the product. They should be the same.
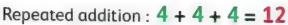
This array shows 3 rows of 4 cupcakes

3 rows

4 in each row

○ To find the total number of cupcakes, you can add or multiply.

Repeated addition : **4 + 4 + 4 = 12**

Multiplication : $\boxed{3} \times \boxed{4} = \boxed{12}$ ┄┄➤ Product "Total"

┄┄┄┄┄➤ Number in each row

┄┄┄┄┄➤ Number of rows

Say : **3** times **4** equals **12**

Another way

The same array shows
4 columns of 3 cupcakes
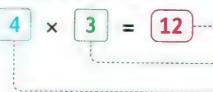
4 columns

3 in each column

○ To find the total number of cupcakes, you can add or multiply.

Repeated addition : **3 + 3 + 3 + 3 = 12**

Multiplication : $\boxed{4} \times \boxed{3} = \boxed{12}$ ┄┄➤ Product "Total"

┄┄┄┄┄➤ Number in each column
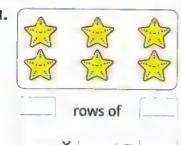
┄┄┄┄┄➤ Number of columns
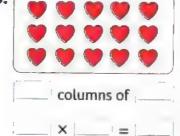
Say : **4** times **3** equals **12**

Check 🔍

Complete.

a.

_____ rows of _____

_____ × _____ = _____

b.

_____ columns of _____

_____ × _____ = _____

c.

_____ rows of _____

_____ × _____ = _____
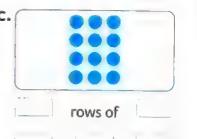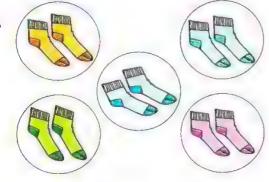
• Let your child use small objects to create an array of 5 rows of 3 and write the multiplication sentence.

Multiplication

1 Write an addition sentence and a multiplication sentence to find the total.

a.

Repeated addition :

—— + —— + —— + —— + —— = ——

Multiplication : —— × —— = ——

b.
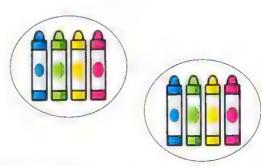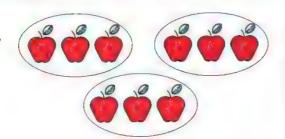
Repeated addition :

—— + —— = ——

Multiplication : —— × —— = ——

c.

Repeated addition :

—— + —— + —— = ——
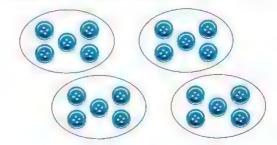
Multiplication : —— × —— = ——

d.

Repeated addition :

—— + —— + —— + —— = ——

Multiplication : —— × —— = ——

e.

Repeated addition :

————————————— = ——
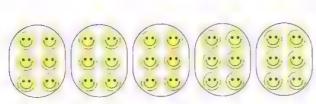
Multiplication : —— × —— = ——

f.

Repeated addition :

————————————— = ——

Multiplication : —— × —— = ——
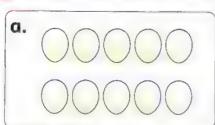
2 Complete each of the following.

a.

_____ rows of _____

_____ × _____ = _____

b.

_____ rows of _____

_____ × _____ = _____

c.

_____ rows of _____

_____ × _____ = _____

d.

_____ columns of _____

_____ × _____ = _____

e.

_____ columns of _____

_____ × _____ = _____

f.

_____ columns of _____

_____ × _____ = _____

g.

_____ columns of _____

_____ × _____ = _____

h.

_____ rows of _____

_____ × _____ = _____

i.

_____ columns of _____

_____ × _____ = _____

j.

_____ rows of _____

_____ × _____ = _____

k.

_____ rows of _____

_____ × _____ = _____

l.
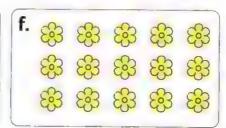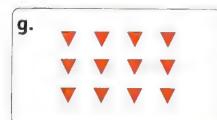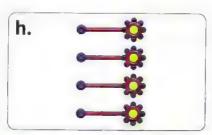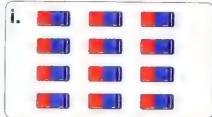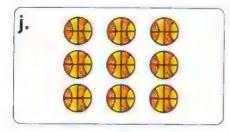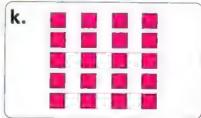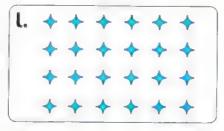
_____ columns of _____

_____ × _____ = _____

3 Match each array to its sentence.

$3 + 3 = 6$

$3 \times 5 = 15$

$4 + 4 + 4 + 4 = 16$

$1 \times 6 = 6$

4 Complete.

a. $3 + 3 + 3 + 3 = - \times 3 = -$

b. $7 + 7 + 7 = - \times 7 = -$

c. $4 + 4 + 4 + 4 + 4 = - \times 4 = -$

d. $- + - + - + - = 4 \times 5 = -$

e. $6 + 6 + 6 = - \times - = -$

f. $9 + 9 + 9 + 9 = - \times - = -$

g. $1 + 1 + 1 + 1 + 1 + 1 = - \times - = -$

h. $8 + 8 + 8 + 8 = - \times - = -$

i. $4 \times 7 = - + - + - + - = -$

j. $2 \times 9 = - + - = -$

k. $3 \times 2 = - + - + - = -$

l. $6 \times 4 = - + - + - + - = -$

m. $- \times 3 = 3 + 3 + 3 + 3 + 3 + 3 = -$

n. $5 \times 5 = - + - + - + - + - = -$

o. $- \times 8 = 8 + 8 + 8 = -$

p. $5 + 5 = 2 \times - = -$

5 Choose the correct answer.

a. $3 + 3 + 3 + 3 + 3 = - \times 3$

    A. 3   B. 4   C. 5   D. 6

b. 4 groups of $2 = -$

    A. $4 + 2$ B. 4×4 C. $2 \times 2 \times 2 \times 2$ D. 4×2

c. 2 groups of $9 = 9 + -$

    A. 2   B. 9   C. 18   D. $9 + 9$

d. $2 \times 3 = 3 + -$

    A. 0   B. 1   C. 2   D. 3

e. $7 + 7 + 7 = 3 \times -$

    A. 3   B. 5   C. 7   D. 9

6 Draw to model groups. Then write an addition sentence and a multiplication sentence for each.

a. 2 groups of 4

b. 3 groups of 2

c. 3 groups of 3

d. 4 groups of 5

e. 2 groups of 3

f. 5 groups of 4

7 Build the array as the example. Write the multiplication sentence.

Example :

4 rows of 3

$4 \times 3 = \boxed{12}$

a.

5 rows of 2

___ × ___ = ☐

b.

3 rows of 6

___ × ___ = ☐

c.

5 columns of 5

___ × ___ = ☐

d.

2 columns of 8

___ × ___ = ☐

e.

4 rows of 7

___ × ___ = ☐

Place a smiley face

Commutative property in multiplication

Learn 1 Commutative property of multiplication "Arrays"

Commutative property of multiplication means that :

You can multiply in any order and the product is the same.

This array is **2** rows of **3**

This array is **3** rows of **2**

2 rows
3 in each row

3 rows
2 in each row

Add : **3** + **3** = **6**

Multiply : **2** × **3** = **6**

Add : **2** + **2** + **2** = **6**
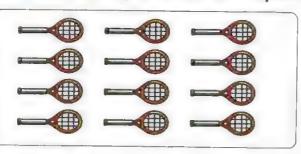
Multiply : **3** × **2** = **6**

The factors can be multiplied in any order and their product is the same.

So, 2 × 3 = 3 × 2 = (6)

Check

Write how many. Write the multiplication sentences.

_____ rows of _____

☐ × ☐ = ☐

_____ rows of _____

☐ × ☐ = ___

What did you notice ? ☐ × ☐ = ☐ × ☐

You can multiply in any order and the product is the same.

> There are 3 groups of 4
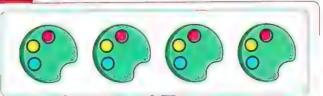
> There are 4 groups of 3

Add : 4 + 4 + 4 = 12

Multiply : 3 × 4 = 12

Add : 3 + 3 + 3 + 3 = 12
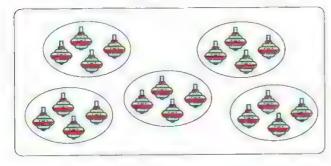
Multiply : 4 × 3 = 12
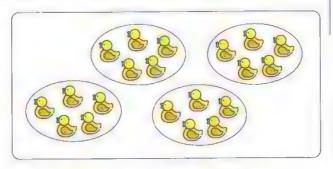
The factors can be multiplied in any order and their product is the same.

So, 3 × 4 = 4 × 3 = ⟮12⟯

Check 🔍

Write how many. Write the multiplication sentences.

_____ groups of _____

_____ × _____ = _____

_____ groups of _____

_____ × _____ = _____

What did you notice ? ☐ × ☐ = ☐ × ☐

Notes for parents
• Ask your child to use objects to show you 2 groups of 5 and 5 groups of 2 and then find how many objects in all of each.
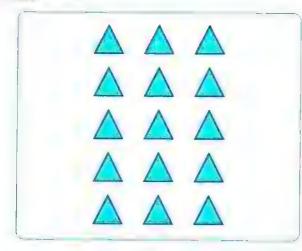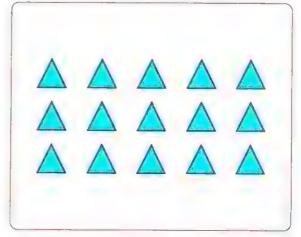
Commutative property in multiplication

1 Complete the following.

a. 📖
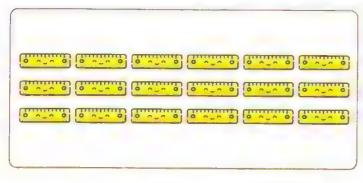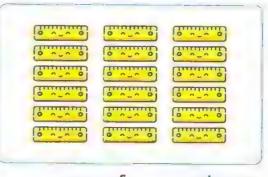
_____ rows of _____ columns

□ × □ = □

_____ rows of _____ columns

□ × □ = □

□ × □ = □ × □

b.
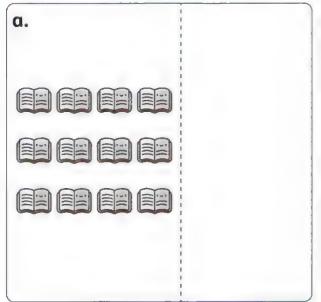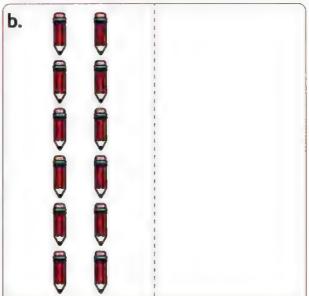
_____ rows of _____ columns

□ × □ = □
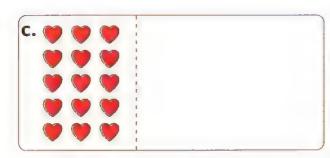
_____ rows of _____ columns

□ × □ = □

□ × □ = □ × □
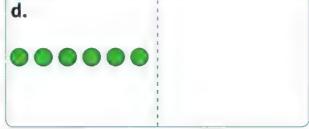
2 Write the multiplication sentence for each array. Then draw the array that shows the commutative property.

a.

b.

c.

d.

---
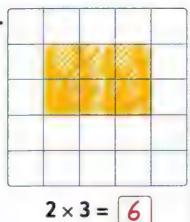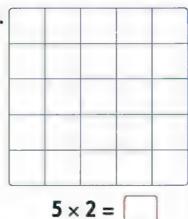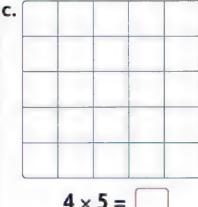
3 Draw the array on the grid according to its multiplication sentence. Write the product. The first one is done for you.

a.

$2 \times 3 = \boxed{6}$

b.

$5 \times 2 = \boxed{}$

c.

$4 \times 5 = \boxed{}$
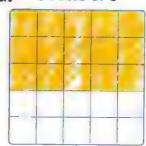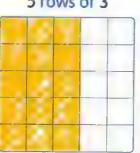
4 Draw the array on the grid according to its multiplications sentence. Then draw the array that shows the commutative property. Then, complete. The first one is done for you.

a. 3 rows of 5   5 rows of 3
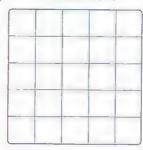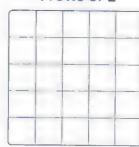
$3 \times 5 = \boxed{15}$ $5 \times 3 = \boxed{15}$

So, $\boxed{3} \times \boxed{5} = \boxed{5} \times \boxed{3} = \boxed{15}$

b. 2 rows of 4   4 rows of 2

$2 \times 4 = \boxed{}$ $4 \times 2 = \boxed{}$

So, $\boxed{} \times \boxed{} = \boxed{} \times \boxed{} = \boxed{}$
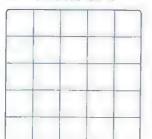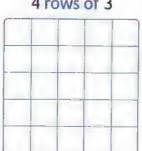
c. 3 rows of 4   4 rows of 3

$3 \times 4 = \boxed{}$ $4 \times 3 = \boxed{}$

So, $\boxed{} \times \boxed{} = \boxed{} \times \boxed{} = \boxed{}$

d. 1 row of 5   5 rows of 1

$1 \times 5 = \boxed{}$ $5 \times 1 = \boxed{}$

So, $\boxed{} \times \boxed{} = \boxed{} \times \boxed{} = \boxed{}$
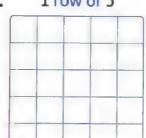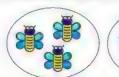
5 Complete the following.

a.

_____ groups of _____   _____ groups of _____

$\boxed{} \times \boxed{} = \boxed{}$ $\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \times \boxed{} = \boxed{} \times \boxed{}$

b.

_____ groups of _____   _____ groups of _____

☐ × ☐ = ☐   ☐ × ☐ = ☐

☐ × ☐ = ☐ × ☐

---

6 Write the multiplication sentence for each equal groups. Then draw the equal groups that shows the commutative property.

a.

☐ × ☐ = ☐ × ☐

b.

☐ × ☐ = ☐ × ☐

c.

☐ × ☐ = ☐ × ☐

d.

☐ × ☐ = ☐ × ☐

7 Complete.

a. $3 \times 5 = 5 \times$ _____

b. $2 \times$ _____ $= 9 \times 2$

c. _____ $\times 8 = 8 \times 7$

d. $4 \times 6 =$ _____ $\times 4$

e. $7 \times 10 = 10 \times$ _____

f. $4 \times$ _____ $= 1 \times$ _____

g. _____ $\times 6 =$ _____ $\times 4$

h. $3 \times$ _____ $= 2 \times$ _____

i. $5 + 5 + 5 + 5 = 5 \times$ _____ $=$ _____ $\times 5$
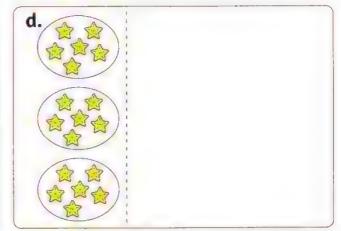
j. $9 + 9 = 2 \times$ _____ $=$ _____ $\times 2$

8 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $7 \times 9 = 9 \times 7$ (   )

b. $1 \times 5 = 15 \times 1$ (   )

c. $2 \times 9 = 18 = 9 \times 2$ (   )

d. $7 + 7 + 7 = 3 + 3 + 3 + 3 + 3 + 3 + 3$ (   )

e. $4 \times 7 = 7 + 4$ (   )

f. $5 \times 6 = 6 - 5$ (   )

9 Match.

a. 3×4 b. $2 + 2 + 2 + 2 + 2$ c. 5×3 d. 5×1

5×2 4×3 $5 + 0$ 3×5

Challenge
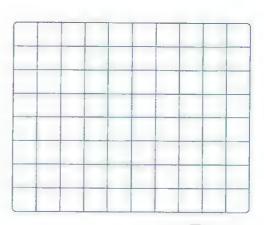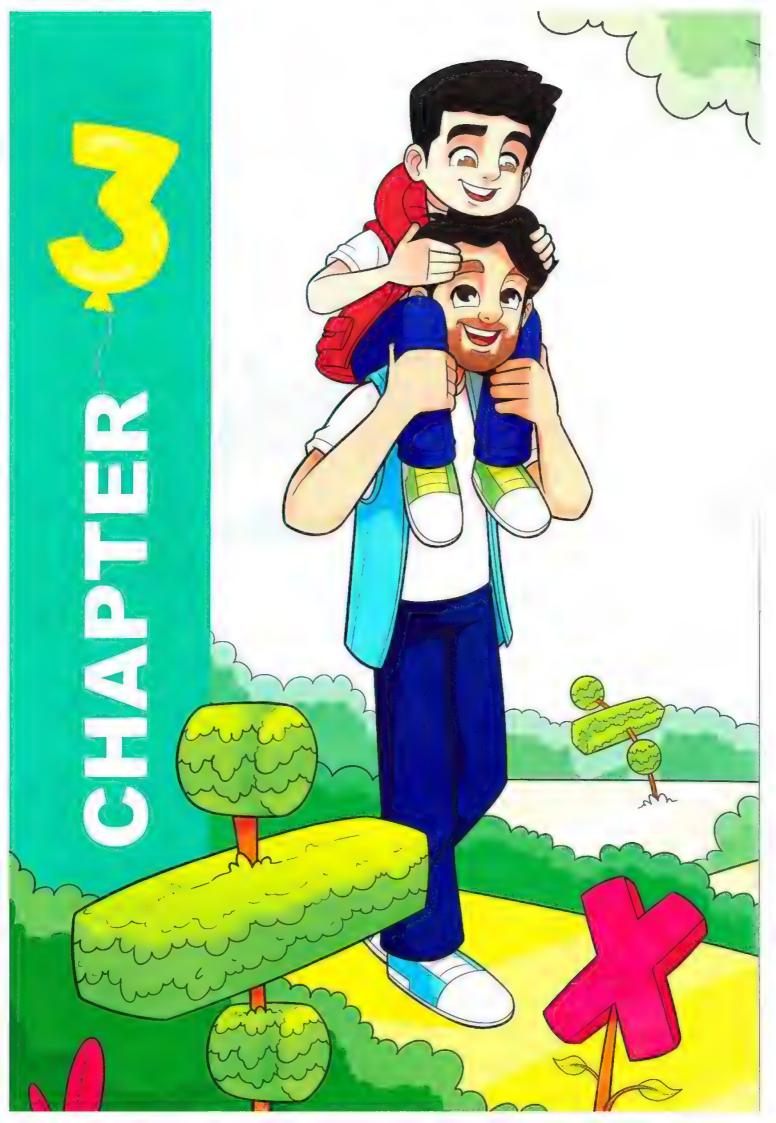
10 Draw and color the array on the opposite grid according to the multiplication sentence 5×7

What is the number of uncolored blocks ? _____

Place a smiley face

Outcomes of chapter three :

At the end of chapter three, your child will be able to:

▶ **Lessons 1 & 2 :**
- **Word problems on multiplication**
- **Applications on multiplication**
- Use a variety of strategies to solve multiplication story problems.
- Explain elements of multiplication story problems.
- Record a multiplication equation to match a story problem.
- Match multiplication equations to story problems.
- Write a multiplication story problem that matches a given equation.

▶ **Lesson 3 :**
- **Multiples of 2 , 3 and 4**
- Explain the rules for multiplying by 0 and 1.
- Identify common multiples of 2 and 3.
- Predict common multiples of 2 and 3 greater than 120.
- Use evidence to justify and explain mathematical thinking.

▶ **Lessons 4 A & 4 B :**
- **Multiples of 5 , 6 and 7** • **Multiples of 8 , 9 and 10**
- Identify the multiples of 5 and 10.
- Identify numerical patterns when multiplying by 5 and 10.
- Explain the relationship between skip counting and multiplication facts.

▶ **Lesson 5 :**
- **Factors of a number using arrays**
- Explore the relationship between multiples of 2, 3 and 6.
- Model the Commutative Property of Multiplication using arrays.
- Identify factor pairs using arrays.

▶ **Lessons 6 & 7 :**
- **Time** • **Applications on time**
- Explain the relationship between skip counting by 5s and telling time to 5-minute increments.
- Read and write time in 5-minute increments on an analog clock.
- Use a variety of strategies to tell time to 5-minute increments.
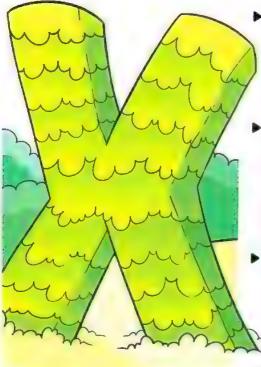
▶ **Lessons 8 & 9 :**
- **Division** • **Applications on division**
- Explain the relationship between sharing equally and dividing.
- Use a variety of strategies to solve division problems.
- Explain his/her thinking when solving division problems.

▶ **Lesson 10 :**
- **The relation between multiplication and division**
- Describe the relationship between factors and their product.
- Use the division symbol.
- Apply the relationship between multiplication and division to identify fact families.
- Solve division problems with one unknown.

- **Word problems on multiplication**
- **Applications on multiplication**

Learn **How to solve multiplication word problem ?**

Eman has **3** plates.

There are **2** oranges in each plate.

How may oranges are there in all ?

Understand

o What do you want to find out ? Circle the question.
o What fact do you need ? Underline them.

• Understand
• Plan
• Solve

Plan

o Write a number sentence to solve.   **3** ✗ **2** ═ ?

Solve
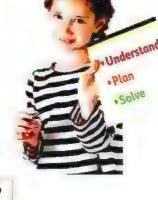
o You can use one of these different ways to solve the problem.

Using repeated addition	Using skip counting	Using objects
○○ ●● ○○ **2** + **2** + **2** = **6**	**2** , **4** , **6** +2 +2	○○ ●● ○○ This is a **3** rows of **2** array. There is **6** objects.

So, **3 x 2 = 6**

Check 🔍

Said saves 7 L.E. each month.
How much money does he
save in 6 months ?

Work area

- **Word problems on multiplication**
- **Applications on multiplication**

1 Match each problem to the suitable multiplication sentence.

a. Jana bought **3** packs of ping-pong balls.

Each pack has **5** balls.

How many balls are there ?

$6 \times 2 = 12$

b. Andy downloaded **3** games onto his tablet. The next day he downloaded **3** more.

How many games has he downloaded ?

$3 \times 5 = 15$

c. A guitar has **6** strings.

How many strings are there in **2** guitars ?

$2 \times 5 = 10$

d. There are **5** apples in a box.

How many apples in **2** boxes ?

$3 \times 2 = 6$

2 Read and solve. You may use counters to solve.

a. Ahmed has 2 packets of sweets each contains 5 pieces of sweets.

How many pieces of sweets Ahmed has ?

_____

Work area

b. 📖 Farha went to the store to buy rolls for a big family dinner. At the store, she bought 4 bags of rolls. Each bag contained 5 rolls.

How many rolls did Farha buy ?

_____
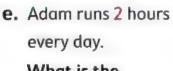
c. 📖 Manal brought 6 bags of cookies to school. Each bag had 3 cookies in it.

How many cookies were there all together ?

_____

d. 📖 Each pack of pencils contains 8 pencils.
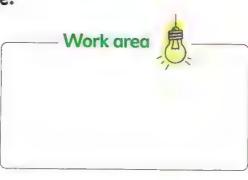
How many pencils are in 3 packs ?

_____

e. Adam runs 2 hours every day.
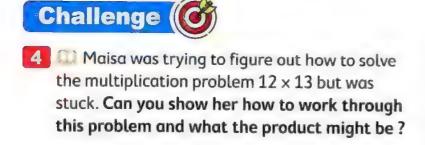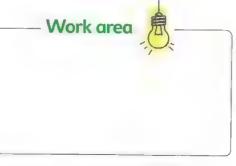
What is the number of running hours in 9 days ?

_____

f. A bag of oranges holds 4 oranges.

How many oranges are in 8 bags ?

_____

g. Rana saw 6 dogs in a garden.

How many legs do the 6 dogs have ?

_____

h. Magi has 5 boxes of 7 balls each and another 4 boxes of 7 balls each. How many balls does she have ?

_____

3 Write a multiplication story for the multiplication sentence. Then solve it. You may use counters to solve.

| 4 x 5 |

_____

_____

_____

Challenge

4 Maisa was trying to figure out how to solve the multiplication problem 12 x 13 but was stuck. **Can you show her how to work through this problem and what the product might be ?**

_____

_____

_____

Place a smiley face

95

Multiples of 2 , 3 and 4

Learn 1 Multiples of 2 , 3 and 4

○ Multiple is the product of a given whole number by any other.

○ You can get multiples of a number by skip counting by this number using a 120 chart.

For example :

To find 2×7

Start at 2 and shade

7 boxes after skip

counting by 2

You will land on 14

So, $2 \times 7 = 14$

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Also :

To find 3×5

Start at 3 and shade

5 boxes after skip

counting by 3

You will land on 15

So, $3 \times 5 = 15$

Multiples of 2

Start from 2
and skip counting by 2

$2 \times 1 = 2$
$2 \times 2 = 4$
$2 \times 3 = 6$
$2 \times 4 = 8$
$2 \times 5 = 10$
$2 \times 6 = 12$
$2 \times 7 = 14$
$2 \times 8 = 16$
$2 \times 9 = 18$
$2 \times 10 = 20$

Multiples of 3

Start from 3
and skip counting by 3

$3 \times 1 = 3$
$3 \times 2 = 6$
$3 \times 3 = 9$
$3 \times 4 = 12$
$3 \times 5 = 15$
$3 \times 6 = 18$
$3 \times 7 = 21$
$3 \times 8 = 24$
$3 \times 9 = 27$
$3 \times 10 = 30$

Multiples of 4

Start from 4
and skip counting by 4

$4 \times 1 = 4$
$4 \times 2 = 8$
$4 \times 3 = 12$
$4 \times 4 = 16$
$4 \times 5 = 20$
$4 \times 6 = 24$
$4 \times 7 = 28$
$4 \times 8 = 32$
$4 \times 9 = 36$
$4 \times 10 = 40$

Check — Find the product.

$2 \times 4 =$ _____

$3 \times 5 =$ _____

$3 \times 7 =$ _____

$4 \times 8 =$ _____

$4 \times 9 =$ _____

$2 \times 10 =$ _____

$2 \times 8 =$ _____

$3 \times 4 =$ _____

• Help your child find the product using different strategies as skip counting and arrays.

Learn 2 Common multiples of 2 and 3

- Use a 120 chart.

- Skip count by 2 to find multiples of 2 up to 60. Shade each multiple of 2 red.

- Skip count by 3 to find multiples of 3 up to 60. Shade each multiple of 3 blue.

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10
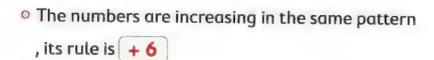
Which numbers are shaded twice ?

- The numbers are 6, 12, 18, 24, 30, 36, 42, 48, 54 and 60
  These numbers are common multiples of 2 and 3 up to 60

What do you notice about these numbers ?

- The numbers are increasing in the same pattern
  , its rule is **+ 6**

  So, you can predict the next common multiple

  60 + 6 = 66

Check

Use the chart. Ring the multiples of 2 and underline the multiples of 3 then, find the multiples of 2 and 3 together.

23	12	15	18	30	66	33
22	48	96	100	54	27	32
20	13	24	29	40	42	50

The common multiples of 2 and 3 together are _____

• Help your child find 3 common multiples of 2 and 3 greater than 70.

Learn 3 Multiplying by 1 and 0

○ Ahmed has 5 baskets.
There is 1 orange in each basket.
How many oranges are there in all ?

○ Rasha has 3 baskets.
There is 0 oranges in each basket.
How many oranges are there in all ?

$$\underline{5} \times \underline{1} = \underline{5} \text{ oranges}$$

$$\underline{3} \times \underline{0} = \underline{0} \text{ oranges}$$

Any number multiplied by 1 equals the same number.

Any number multiplied by 0 equals 0

Check

The multiplication operation is commutative.

Remember

Find each product.

5×1 ☐

4×1 ☐

9×1 ☐

0×5 ☐

7×1 ☐

12×0 ☐

$$\begin{array}{r} 6 \\ \times \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times \quad 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times \quad 1 \\ \hline \end{array}$$

Notes for parents
• Ask your child which is greater, the product of his/her age times 0 or the product of his/her age times 1 ?

Multiples of 2 , 3 and 4

1 Find the product.

$2 \times 0 =$ _____	$3 \times 0 =$ _____	$4 \times 0 =$ _____
$2 \times 1 =$ _____	$3 \times 1 =$ _____	$4 \times 1 =$ _____
$2 \times 2 =$ _____	$3 \times 2 =$ _____	$4 \times 2 =$ _____
$2 \times 3 =$ _____	$3 \times 3 =$ _____	$4 \times 3 =$ _____
$2 \times 4 =$ _____	$3 \times 4 =$ _____	$4 \times 4 =$ _____
$2 \times 5 =$ _____	$3 \times 5 =$ _____	$4 \times 5 =$ _____
$2 \times 6 =$ _____	$3 \times 6 =$ _____	$4 \times 6 =$ _____
$2 \times 7 =$ _____	$3 \times 7 =$ _____	$4 \times 7 =$ _____
$2 \times 8 =$ _____	$3 \times 8 =$ _____	$4 \times 8 =$ _____
$2 \times 9 =$ _____	$3 \times 9 =$ _____	$4 \times 9 =$ _____
$2 \times 10 =$ _____	$3 \times 10 =$ _____	$4 \times 10 =$ _____

$2 \times 7 =$ _____	$3 \times 5 =$ _____	$4 \times 3 =$ _____
$2 \times 5 =$ _____	$3 \times 1 =$ _____	$4 \times 9 =$ _____
$2 \times 2 =$ _____	$3 \times 7 =$ _____	$4 \times 6 =$ _____
$2 \times 3 =$ _____	$3 \times 0 =$ _____	$4 \times 1 =$ _____
$2 \times 9 =$ _____	$3 \times 9 =$ _____	$4 \times 10 =$ _____
$2 \times 1 =$ _____	$3 \times 2 =$ _____	$4 \times 0 =$ _____
$2 \times 4 =$ _____	$3 \times 10 =$ _____	$4 \times 2 =$ _____
$2 \times 8 =$ _____	$3 \times 4 =$ _____	$4 \times 7 =$ _____
$2 \times 6 =$ _____	$3 \times 6 =$ _____	$4 \times 4 =$ _____
$2 \times 10 =$ _____	$3 \times 3 =$ _____	$4 \times 8 =$ _____
$2 \times 0 =$ _____	$3 \times 8 =$ _____	$4 \times 5 =$ _____

2 Find each product.

a. 3×7 ☐ b. 2×4 ☐ c. 2×8 ☐ d. 3×8 ☐

e. 1×2 ☐ f. 5×3 ☐ g. 2×2 ☐ h. 3×4 ☐

i. 4×7 ☐ j. 4×3 ☐ k. 4×4 ☐ l. 3×5 ☐

m. 5×4 ☐ n. 4×10 ☐ o. 6×4 ☐ p. 4×8 ☐

q. 2×3 ☐ r. 2×7 ☐ s. 2×6 ☐ t. 3×6 ☐

u. 2×1 ☐ v. 5×2 ☐ w. 2×9 ☐ x. 10×3 ☐

y. 3×3 ☐ z. 3×2 ☐

3 Find the product.

a.
$$\begin{array}{r} 4 \\ \times\ 8 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 5 \\ \times\ 4 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 4 \\ \times\ 1 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 9 \\ \times\ 3 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 2 \\ \times\ 10 \\ \hline \end{array}$$

f.
$$\begin{array}{r} 2 \\ \times\ 4 \\ \hline \end{array}$$

g.
$$\begin{array}{r} 3 \\ \times\ 0 \\ \hline \end{array}$$

h.
$$\begin{array}{r} 2 \\ \times\ 9 \\ \hline \end{array}$$

i.
$$\begin{array}{r} 3 \\ \times\ 1 \\ \hline \end{array}$$

j.
$$\begin{array}{r} 1 \\ \times\ 3 \\ \hline \end{array}$$

k.
$$\begin{array}{r} 3 \\ \times\ 9 \\ \hline \end{array}$$

l.
$$\begin{array}{r} 4 \\ \times\ 2 \\ \hline \end{array}$$

m.
$$\begin{array}{r} 6 \\ \times\ 0 \\ \hline \end{array}$$

n.
$$\begin{array}{r} 7 \\ \times\ 2 \\ \hline \end{array}$$

o.
$$\begin{array}{r} 4 \\ \times\ 5 \\ \hline \end{array}$$

4 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $3 \times 5 = 8$ (   )   b. $2 \times 7 = 14$ (   )

c. $1 \times 4 = 4$ (   )   d. $4 \times 10 = 14$ (   )

e. $0 \times 7 = 7$ (   )   f. $2 \times 6 = 12$ (   )

g. $2 \times 5 = 5 + 5 = 10$ (   )   h. $3 \times 9 = 3 + 3 + 3$ (   )

i. $3 \times 2 = 6 + 0$ (   )   j. $2 \times 8 = 4 \times 4$ (   )

k. $3 \times 3 = 3 + 3$ (   )   l. $1 \times 3 = 1 + 1 + 1$ (   )

m. $4 \times 7 = 28$ (   )   n. $0 \times 7 = 0 + 7$ (   )

o. $4 \times 5 = 2 \times 10$ (   )   p. $0 \times 9 = 0$ (   )

---

5 Join the equal results.

a. 2×5 b. 2×3 c. 3×3 d. 2×9 e. 4×3

$6 + 3$ 3×6 6×2 $5 + 5$ 3×2

---

6 Color the multiplication sentences in each row that have the same product.

a. 4×3 3×5 2×6

b. 2×10 8×3 4×6

c. 3×6 9×2 4×4

d. 4×0 0×3 4×1

7 Choose the correct answer.

a.
$2 \times \underline{\hspace{1cm}} = 10$
- ○ 10
- ○ 5
- ○ 3
- ○ 8

b.
$\underline{\hspace{1cm}} \times 3 = 30$
- ○ 6
- ○ 8
- ○ 10
- ○ 5

c.
$\underline{\hspace{1cm}} \times 2 = 18$
- ○ 8
- ○ 16
- ○ 7
- ○ 9

d.
$2 \times \underline{\hspace{1cm}} = 4 + 4 + 4$
- ○ 2
- ○ 4
- ○ 6
- ○ 8

e.
$4 \times \underline{\hspace{1cm}} = 36$
- ○ 10
- ○ 8
- ○ 9
- ○ 1

f.
$1 \times \underline{\hspace{1cm}} = 9$
- ○ 1
- ○ 8
- ○ zero
- ○ 9

g.
$0 \times 7 = \underline{\hspace{1cm}}$
- ○ 0
- ○ 7
- ○ 1
- ○ 5

h.
$\underline{\hspace{1cm}} \times 7 = 14$
- ○ 1
- ○ 2
- ○ 3
- ○ 4

i.
$\underline{\hspace{1cm}} \times 8 = 24$
- ○ 1
- ○ 2
- ○ 3
- ○ 4

j.
$\underline{\hspace{1cm}} \times 10 = 40$
- ○ 1
- ○ 2
- ○ 3
- ○ 4

k.
$2 \times \underline{\hspace{1cm}} = 16$
- ○ 5
- ○ 7
- ○ 8
- ○ 9

l.
$3 \times \underline{\hspace{1cm}} = 21$
- ○ 5
- ○ 6
- ○ 7
- ○ 8

m.
$4 \times \underline{\hspace{1cm}} = 16$
- ○ 1
- ○ 2
- ○ 3
- ○ 4

n.
$1 \times \underline{\hspace{1cm}} = 8$
- ○ 6
- ○ 7
- ○ 8
- ○ 9

o.
$\underline{\hspace{1cm}} \times 10 = zero$
- ○ 0
- ○ 1
- ○ 2
- ○ 3

p.
$\underline{\hspace{1cm}} \times 5 = 5$
- ○ 0
- ○ 1
- ○ 2
- ○ 3

8 Put "< , > or =".

a. 3×5 ◯ 2×4 b. 1×4 ◯ 0×4

c. $0 + 3$ ◯ 0×3 d. 2×2 ◯ $2 + 2$

e. $15 - 5$ ◯ 2×5 f. 4×4 ◯ $4 - 4$

g. 2×9 ◯ 3×6 h. 3×9 ◯ 3×10

i. $7 + 7$ ◯ 3×7 j. $8 - 8$ ◯ 2×8

k. $9 + 9 + 9$ ◯ 3×9 l. 4×7 ◯ $68 - 40$

m. $1 + 1 + 1 + 1 + 1$ ◯ 1×6 n. $3 - 3$ ◯ 3×0

o. 3×9 ◯ 2×9 p. 4×6 ◯ 4×10

q. 2×10 ◯ 4×5 r. 2×5 ◯ 3×4

---

9 Word problems on Multiples of 2 , 3 and 4

a. If the price of one metre of cloth is 9 L.E., then find the price of 4 metres of this cloth.

The price of 4 metres = _____ = _____ L.E.

---

b. How many flowers are there in 3 bunches of flowers if each has 10 flowers ?

The number of flowers in the bunches = _____ = _____ flowers.

---

c. There are 2 lions in a cage.

How many lions are there in 8 cages ?

The number of lions = _____ = _____ lions.

10 Use the chart.

    a. Ring the multiples of 2

       15   24   32   17   50   44

    b. Ring the multiples of 3

       22   18   40   20   33   13

    c. Ring the multiples of 4

       5   16   12   20   31   17

    d. Write the multiples of 2 up to 30

    e. Write the multiples of 2 between 31 and 55

    f. Write the multiples of 3 up to 40

    g. Write the multiples of 3 between 41 and 50

    h. Write the multiples of 4 up to 50

    i. Write three common multiples of 2 and 3 greater than 40 and smaller than 70

    j. Write three common multiples of 2 and 3 between 80 and 100

11 Complete. Write $+$ or $\times$.

    a. 8   1 = 9   **b.** 9   1 = 9   **c.** 0   5 = 5

    d. 2   0 = 2   **e.** 0   7 = 0   **f.** 1   7 = 8

Challenge

12 Three numbers, their sum equals their product.

    What are these numbers ? _____

Place a smiley face

Multiples of 5 , 6 and 7

Learn Multiples of 5 , 6 and 7

○ You can get multiples of 5 , 6 or 7 by skip counting by this number using a 120 chart.

For example :

To find 5×6
start at 5 and shade
6 boxes after skip
counting by 5
You will land on 30
So, $5 \times 6 = 30$

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Also :

To find 6×7
start at 6 and shade
7 boxes after skip
counting by 6
You will land on 42
So, $6 \times 7 = 42$

Multiples of 5
Start from 5 and skip counting by 5

$5 \times 1 = 5$
$5 \times 2 = 10$
$5 \times 3 = 15$
$5 \times 4 = 20$
$5 \times 5 = 25$
$5 \times 6 = 30$
$5 \times 7 = 35$
$5 \times 8 = 40$
$5 \times 9 = 45$
$5 \times 10 = 50$

Multiples of 6
Start from 6 and skip counting by 6

$6 \times 1 = 6$
$6 \times 2 = 12$
$6 \times 3 = 18$
$6 \times 4 = 24$
$6 \times 5 = 30$
$6 \times 6 = 36$
$6 \times 7 = 42$
$6 \times 8 = 48$
$6 \times 9 = 54$
$6 \times 10 = 60$

Multiples of 7
Start from 7 and skip counting by 7

$7 \times 1 = 7$
$7 \times 2 = 14$
$7 \times 3 = 21$
$7 \times 4 = 28$
$7 \times 5 = 35$
$7 \times 6 = 42$
$7 \times 7 = 49$
$7 \times 8 = 56$
$7 \times 9 = 63$
$7 \times 10 = 70$

Check Find the product.

$5 \times 7 =$ _____

$7 \times 8 =$ _____

$6 \times 8 =$ _____

$5 \times 6 =$ _____

$7 \times 4 =$ _____

$6 \times 3 =$ _____

$5 \times 9 =$ _____

$6 \times 10 =$ _____

Notes for parents

• Help your child skip counting by 5 , 6 and 7 on the 120 chart.

Multiples of 5 , 6 and 7

1 Find the product.

5 × 0 = _____	6 × 0 = _____	7 × 0 = _____
5 × 1 = _____	6 × 1 = _____	7 × 1 = _____
5 × 2 = _____	6 × 2 = _____	7 × 2 = _____
5 × 3 = _____	6 × 3 = _____	7 × 3 = _____
5 × 4 = _____	6 × 4 = _____	7 × 4 = _____
5 × 5 = _____	6 × 5 = _____	7 × 5 = _____
5 × 6 = _____	6 × 6 = _____	7 × 6 = _____
5 × 7 = _____	6 × 7 = _____	7 × 7 = _____
5 × 8 = _____	6 × 8 = _____	7 × 8 = _____
5 × 9 = _____	6 × 9 = _____	7 × 9 = _____
5 × 10 = _____	6 × 10 = _____	7 × 10 = _____

2 Find the product.

5 × 6 = _____	6 × 4 = _____	7 × 8 = _____
5 × 2 = _____	6 × 10 = _____	7 × 1 = _____
5 × 1 = _____	6 × 0 = _____	7 × 9 = _____
5 × 8 = _____	6 × 3 = _____	7 × 0 = _____
5 × 0 = _____	6 × 1 = _____	7 × 2 = _____
5 × 3 = _____	6 × 6 = _____	7 × 10 = _____
5 × 10 = _____	6 × 5 = _____	7 × 6 = _____
5 × 7 = _____	6 × 8 = _____	7 × 3 = _____
5 × 5 = _____	6 × 2 = _____	7 × 5 = _____
5 × 4 = _____	6 × 7 = _____	7 × 4 = _____
5 × 9 = _____	6 × 9 = _____	7 × 7 = _____

3 Find each product.

a. 7 × 7 ☐ b. 5 × 6 ☐ c. 6 × 4 ☐ d. 7 × 3 ☐

e. 6 × 8 ☐ f. 7 × 10 ☐ g. 6 × 5 ☐ h. 5 × 2 ☐

i. 5 × 8 ☐ j. 5 × 4 ☐ k. 5 × 1 ☐ l. 5 × 9 ☐

m. 7 × 4 ☐ n. 5 × 7 ☐ o. 6 × 6 ☐ p. 6 × 7 ☐

q. 6 × 9 ☐ r. 7 × 8 ☐ s. 7 × 5 ☐ t. 7 × 2 ☐

u. 5 × 5 ☐ v. 7 × 0 ☐ w. 6 × 3 ☐ x. 7 × 6 ☐

y. 7 × 9 ☐ z. 5 × 3 ☐

4 Find the result.

a.
```
    10
×    5
_____
_____
```

b.
```
    10
×    7
_____
_____
```

c.
```
     2
×    5
_____
_____
```

d.
```
     5
×    5
_____
_____
```

e.
```
     5
×    6
_____
_____
```

f.
```
     3
×    5
_____
_____
```

g.
```
     8
×    7
_____
_____
```

h.
```
    10
×    6
_____
_____
```

i.
```
     7
×    5
_____
_____
```

j.
```
     6
×    7
_____
_____
```

5 Put ">, = or <".

a. 5×5 ◯ 6×6 b. 5×7 ◯ 5×8

c. 7×3 ◯ 6×5 d. $5 + 5$ ◯ 5×5

e. 5×8 ◯ 7×4 f. 7×5 ◯ 5×3

g. 6×6 ◯ 6×5 h. 5×7 ◯ 7×3

i. 6×9 ◯ 7×7 j. 6×4 ◯ 5×7

k. 6×8 ◯ 7×7 l. $5 + 5$ ◯ 5×2

m. 7×0 ◯ $7 + 0$ n. 6×8 ◯ 7×9

o. 5×5 ◯ 6×4 p. 7×10 ◯ 6×9

q. 6×1 ◯ 7×0 r. 5×9 ◯ 7×8

s. 7×6 ◯ 6×7 t. $7 + 7 + 7 + 7$ ◯ 7×7

u. $7 + 5$ ◯ 5×6 v. $11 + 9$ ◯ 5×4

---

6 Choose the correct answer.

a. $5 \times 6 =$ _____ $(3 \times 10$ or 4×10 or 6×6 or $7 \times 9)$

b. $6 \times 7 >$ _____ $(63$ or 72 or 27 or $100)$

c. $4 \times 7 >$ _____ $(8 \times 3$ or 4×10 or 9×5 or $6 \times 10)$

d. $7 \times 5 =$ _____ $(53$ or 42 or 35 or $12)$

e. $7 \times 1 =$ _____ $+ 7$ $(0$ or 1 or 2 or $3)$

f. $0 \times 6 =$ _____ $(1 + 1$ or $1 - 1$ or 1×1 or $8)$

g. $5 \times 9 =$ _____ $(19$ or $40 + 5$ or 54 or $14)$

h. All the following equals to 30 except _____

$(5 \times 6$ or 3×10 or $3 + 10$ or $6 \times 5)$

i. All the following are equal to 28 except _____

$(6 \times 4$ or 4×7 or 7×4 or 2 tens and 8 ones$)$

j. Which of the following is equal to 48 ?

$(5 \times 8$ or 7×8 or 6×8 or $8 + 8 + 8 + 8)$

k. Which of the following is equal to 40 ? $(6 \times 7$ or 7×5 or 5×8 or $4 \times 9)$

7 Match.

a. 4×9　　b. 0×6　　c. 2×9　　d. 6×1　　e. 6×4

1. 7×0　　2. 6×6　　3. 3×6　　4. $20 + 4$　　5. $6 + 0$

8 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $5 \times 8 = 4 \times 10 = 40$ 　　　　　　　(　)

b. $6 \times 7 < 5 \times 8$ 　　　　　　　　(　)

c. $5 + 5 + 5 = 5 \times 3 = 15$ 　　　　　(　)

d. $7 \times 1 = 7 + 0$ 　　　　　　　　(　)

e. $7 \times 0 = 0 \times 5$ 　　　　　　　　(　)

f. $7 \times 5 > 5 \times 6$ 　　　　　　　　(　)

g. $7 \times 6 = 40 + 2$ 　　　　　　　　(　)

h. $6 + 6 + 6 + 6 + 6 + 6 = 6 \times 6 = 66$ 　　(　)

i. $7 \times 9 = 36$ 　　　　　　　　　(　)

j. $6 \times 5 = 3 \times 10$ 　　　　　　　(　)

k. $6 \times 9 < 6 \times 10$ 　　　　　　　(　)

l. $7 + 7 + 7 + 7 + 7 + 7 + 7 > 7 \times 6$ 　　(　)

9 Use the chart. Choose yes or no.

a. Is 15 a multiple of 5?　　　　　　b. Is 70 a multiple of 5?

　　Yes　　　　No　　　　　　　　Yes　　　　No

c. Is 54 a multiple of 7?　　　　　　d. Is 63 a multiple of 7?

　　Yes　　　　No　　　　　　　　Yes　　　　No

e. Is 6 a multiple of 6?　　　　　　f. Is 1 a multiple of 6?

　　Yes　　　　No　　　　　　　　Yes　　　　No

10 Word problems.

a. If the weight of one fish is 2 kg.

Find the weight of 6 fish.

The weight of 6 fish = _____ = _____ kg.

b. The pupils of one of the third primary classes
stood in 5 lines with 8 pupils in each line.
How many pupils are there in this class ?

Number of the pupils = _____ = _____ pupils.

c. Aly bought 7 bars of chocolate for 4 pounds each.

How much money did Aly pay ?

Aly paid = _____ = _____ pounds.

d. Nagwa bought 5 bags of oranges and each bag

contains 9 oranges.

How many oranges did Nagwa buy ?

The number of oranges = _____ = _____ oranges.

11 Use the chart.

a. Write the first three common multiples of 5 and 6.

_____

_____

b. Write the first three common multiples of 5 and 7.

_____

_____

Challenge

12 How many common multiples of 5 , 6 and 7 are there up to 120 ?

(You can use a 120 chart).

_____

_____

Place
a smiley
face

Multiples of 8 , 9 and 10

Learn 1 Multiples of 8 , 9 and 10

○ You can get multiples of 8 , 9 or 10 by skip counting by this number using a 120 chart.

For example :

To find 8×9 start at 8 and shade 9 boxes after skip counting by 8

You will land on 72

So, $8 \times 9 = 72$

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Also :

To find 10×8 start at 10 and shade 8 boxes after skip counting by 10

You will land on 80

So, $10 \times 8 = 80$

Multiples of 8

Start from 8 and skip counting by 8

$8 \times 1 = 8$
$8 \times 2 = 16$
$8 \times 3 = 24$
$8 \times 4 = 32$
$8 \times 5 = 40$
$8 \times 6 = 48$
$8 \times 7 = 56$
$8 \times 8 = 64$
$8 \times 9 = 72$
$8 \times 10 = 80$

Multiples of 9

Start from 9 and skip counting by 9

$9 \times 1 = 9$
$9 \times 2 = 18$
$9 \times 3 = 27$
$9 \times 4 = 36$
$9 \times 5 = 45$
$9 \times 6 = 54$
$9 \times 7 = 63$
$9 \times 8 = 72$
$9 \times 9 = 81$
$9 \times 10 = 90$

Multiples of 10

Start from 10 and skip counting by 10

$10 \times 1 = 10$
$10 \times 2 = 20$
$10 \times 3 = 30$
$10 \times 4 = 40$
$10 \times 5 = 50$
$10 \times 6 = 60$
$10 \times 7 = 70$
$10 \times 8 = 80$
$10 \times 9 = 90$
$10 \times 10 = 100$

Check Use the chart. Find each product.

$8 \times 7 =$ _____ $9 \times 9 =$ _____ $10 \times 3 =$ _____ $8 \times 5 =$ _____

$8 \times 8 =$ _____ $7 \times 10 =$ _____ $6 \times 9 =$ _____ $9 \times 8 =$ _____

Notes for parents

• Help your child discover that the ones digit for the multiples of 10 is 0.

Learn 2 Common multiples of 5 and 10

○ Using a 120 chart.

○ Draw a circle around each multiple of 5 and a triangle on each multiple of 10 on this chart up to 60.

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	(55)	56	57	58	59	△60
41	42	43	44	(45)	46	47	48	49	△50
31	32	33	34	(35)	36	37	38	39	△40
21	22	23	24	(25)	26	27	28	29	△30
11	12	13	14	(15)	16	17	18	19	△20
1	2	3	4	(5)	6	7	8	9	△10

○ **Which numbers are marked twice on the chart ?**

- The numbers are 10, 20, 30, 40, 50 and 60

- These numbers are common multiples of 5 and 10

○ **What do you notice about these numbers ?**

- The ones digit is 0

Check
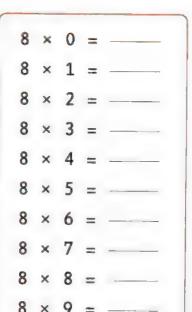
Circle the multiples of 5 and underline the multiples of 10, then deduce the common multiples of 5 and 10.

15	50	55	65	70	25
40	105	110	90	85	30

• Multiples of 5 are ──────────────

• Multiples of 10 are ──────────────

• The common multiples of 5 and 10 are ──────────

Notes for parents
• Ask your child to find common multiples of 5 and 10 greater than 60.
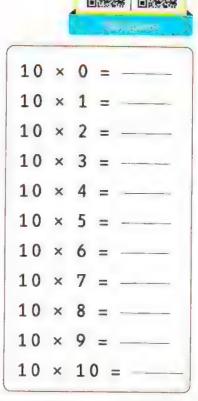
Multiples of 8 , 9 and 10

1 Find the product.

8 × 0 = ———	9 × 0 = ———	10 × 0 = ———
8 × 1 = ———	9 × 1 = ———	10 × 1 = ———
8 × 2 = ———	9 × 2 = ———	10 × 2 = ———
8 × 3 = ———	9 × 3 = ———	10 × 3 = ———
8 × 4 = ———	9 × 4 = ———	10 × 4 = ———
8 × 5 = ———	9 × 5 = ———	10 × 5 = ———
8 × 6 = ———	9 × 6 = ———	10 × 6 = ———
8 × 7 = ———	9 × 7 = ———	10 × 7 = ———
8 × 8 = ———	9 × 8 = ———	10 × 8 = ———
8 × 9 = ———	9 × 9 = ———	10 × 9 = ———
8 × 10 = ———	9 × 10 = ———	10 × 10 = ———

2 Find the result.

8 × 3 = ———	9 × 8 = ———	10 × 0 = ———
8 × 5 = ———	9 × 2 = ———	10 × 3 = ———
8 × 9 = ———	9 × 6 = ———	10 × 6 = ———
8 × 0 = ———	9 × 10 = ———	10 × 9 = ———
8 × 7 = ———	9 × 4 = ———	10 × 1 = ———
8 × 2 = ———	9 × 0 = ———	10 × 4 = ———
8 × 4 = ———	9 × 7 = ———	10 × 7 = ———
8 × 6 = ———	9 × 3 = ———	10 × 5 = ———
8 × 8 = ———	9 × 9 = ———	10 × 2 = ———
8 × 1 = ———	9 × 5 = ———	10 × 8 = ———
8 × 10 = ———	9 × 1 = ———	10 × 10 = ———

3 Find each product.

a. 8×7 ___

b. 9×6 ___

c. 10×4 ___

d. 8×0 ___

e. 9×5 ___

f. 10×10 ___

g. 8×2 ___

h. 9×9 ___

i. 10×6 ___

j. 8×4 ___

k. 9×1 ___

l. 10×7 ___

m. 8×1 ___

n. 9×8 ___

o. 8×3 ___

p. 9×4 ___

q. 8×8 ___

r. 10×8 ___

s. 8×10 ___

t. 9×7 ___

u. 8×5 ___

v. 8×9 ___

w. 8×6 ___

x. 10×5 ___
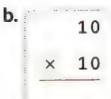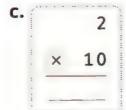
y. 10×9 ___

z. 10×3 ___

4 Find the product.

a.
$$\begin{array}{r} 10 \\ \times \quad 4 \\ \hline \end{array}$$
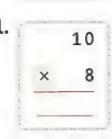
b.
$$\begin{array}{r} 10 \\ \times \quad 10 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 2 \\ \times \quad 10 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 5 \\ \times \quad 9 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 5 \\ \times \quad 8 \\ \hline \end{array}$$

f.
$$\begin{array}{r} 3 \\ \times \quad 10 \\ \hline \end{array}$$

g.
$$\begin{array}{r} 6 \\ \times \quad 8 \\ \hline \end{array}$$

h.
$$\begin{array}{r} 7 \\ \times \quad 9 \\ \hline \end{array}$$

i.
$$\begin{array}{r} 1 \\ \times \quad 10 \\ \hline \end{array}$$

j.
$$\begin{array}{r} 4 \\ \times \quad 10 \\ \hline \end{array}$$

k.
$$\begin{array}{r} 9 \\ \times \quad 10 \\ \hline \end{array}$$

l.
$$\begin{array}{r} 10 \\ \times \quad 8 \\ \hline \end{array}$$

5 Put ">, = or <".

a. 9×5 ◯ 8×6

c. 10×3 ◯ 9×5

e. 8×8 ◯ 10×4

g. 8×5 ◯ 5×8

i. 9×4 ◯ 8×7

k. 9×9 ◯ 8×7

m. 8×0 ◯ 8×1

o. 8×8 ◯ $8 + 8$

q. 9×8 ◯ 10×9

s. 8×10 ◯ 9×9

u. 9×3 ◯ 3×9

w. $8 + 8 + 8 + 8$ ◯ 8×8

y. $7 + 11$ ◯ 9×2

b. 9×7 ◯ 8×8

d. $8 + 9$ ◯ 8×9

f. 10×5 ◯ 5×10

h. 9×6 ◯ 8×5

j. 9×0 ◯ 8×0

l. 9×4 ◯ 10×7

n. 7×7 ◯ 8×6

p. 9×0 ◯ $9 + 0$

r. 10×4 ◯ 8×5

t. 6×9 ◯ 7×7

v. 9×6 ◯ 9×7

x. $9 + 9 + 9 + 9$ ◯ 9×4

z. $3 + 9$ ◯ 9×3

6 Choose the correct answer.

a. $8 \times 5 =$ _____ $(3 \times 10$ or 4×10 or 6×6 or $7 \times 9)$

b. $9 \times 6 >$ _____ $(54$ or 72 or 43 or $90)$

c. $8 \times 7 <$ _____ $(8 \times 3$ or 4×10 or 9×5 or $6 \times 10)$

d. $5 \times 10 =$ _____

$(10 + 10 + 10$ or $10 + 10 + 10 + 10$ or $10 + 10 + 10 + 10 + 10$ or $10 + 10)$

e. $9 \times 5 =$ _____ $(54$ or 45 or 95 or $14)$

f. $8 \times 9 = 70 +$ _____ $(1$ or 2 or 3 or $4)$

g. $1 \times 8 =$ _____ $+ 8$ $(0$ or 1 or 2 or $3)$

h. $8 \times 0 =$ _____ $(1 + 1$ or $1 - 1$ or 1×1 or $8)$

i. $10 \times 9 =$ _____ $(19$ or $10 + 9$ or 91 or $90)$

j. All the following are equal to 40 except _____

$(8 \times 5$ or 10×4 or $10 + 30$ or $0 \times 12)$

k. All the following are equal to 36 except _____

$$(9 \times 4 \quad \text{or} \quad 6 \times 6 \quad \text{or} \quad 3 \times 10 \quad \text{or} \quad 3 \text{ tens and } 6 \text{ ones})$$

l. Which of the following is equal to 90 ?

$$(9 \times 9 \quad \text{or} \quad 9 \times 10 \quad \text{or} \quad 9 \times 5 \quad \text{or} \quad 9+9+9+9+9+9+9)$$

m. Which of the following is equal to zero ?

$$(8 \times 1 \quad \text{or} \quad 10 \times 1 \quad \text{or} \quad 8 \times 0 \quad \text{or} \quad 9 \times 1)$$

---

7 Join the equal results.

a. 10×4 **b.** 4×5 **c.** 2×5 **d.** 5×6 **e.** 10×5

1. 3×10 **2.** 5×10 **3.** 10×2 **4.** 8×5 **5.** 10×1

---

8 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $8 \times 5 = 4 \times 10 = 40$ (   )

b. $9 \times 7 < 8 \times 8$ (   )

c. $8 + 8 + 8 + 8 + 8 + 8 = 8 \times 7 = 56$ (   )

d. $9 \times 9 = 9 + 9$ (   )

e. $10 \times 0 = 0 \times 8$ (   )

f. $8 \times 8 > 10 \times 6$ (   )

g. $9 \times 6 = 40 + 5$ (   )

h. $10 + 10 + 10 = 10 \times 3 = 30$ (   )

i. $8 \times 9 = 27$ (   )

j. $8 \times 10 = 9 \times 9$ (   )

k. $10 \times 9 < 8 \times 9$ (   )

l. $7 + 7 + 7 + 7 = 9 \times 3$ (   )

m. $9 \times 0 = 8 + 1$ (   )

n. $72 = 9 \times 8 = 8 \times 9$ (   )

9 **Use the chart.**

a. Write three common multiples of 5 and 10 greater than 63 and smaller than 98

_____   _____

_____

b. Write three common multiples of 5 and 10 greater than 99 and smaller than 125

_____   _____

_____

c. Write three common multiples of 5 and 10 less than 100

_____   _____

_____

---

10 **Word problems.**

a. A box of spread cheese has 8 pieces.
What is the number of pieces in 9 boxes ?
The number of pieces in 9 boxes

= _____ = _____ pieces.

---

b. Wael bought ten books for 9 pounds each.
What is the price of all books ?
The price of all books = _____ = _____ pounds.

---

c. There are eight carriages in each toy train.
How many carriages are there in six trains ?
The number of carriages = _____

= _____ carriages.

Challenge

11 Heba says that 37 is a multiple of 10 because the digits 3 and 7 add to 10.
Do you agree ? Explain.

_____   _____

_____

Place
a smiley
face

Review on the Multiples

1 Find the result.

1. $4 \times 7 = \underline{\hspace{1cm}}$
2. $9 \times 5 = \underline{\hspace{1cm}}$
3. $7 \times 9 = \underline{\hspace{1cm}}$
4. $8 \times 8 = \underline{\hspace{1cm}}$

5. $3 \times 8 = \underline{\hspace{1cm}}$
6. $6 \times 5 = \underline{\hspace{1cm}}$
7. $4 \times 9 = \underline{\hspace{1cm}}$
8. $8 \times 6 = \underline{\hspace{1cm}}$

9. $5 \times 8 = \underline{\hspace{1cm}}$
10. $9 \times 8 = \underline{\hspace{1cm}}$
11. $6 \times 4 = \underline{\hspace{1cm}}$
12. $1 \times 6 = \underline{\hspace{1cm}}$

13. $9 \times 0 = \underline{\hspace{1cm}}$
14. $6 \times 8 = \underline{\hspace{1cm}}$
15. $9 \times 9 = \underline{\hspace{1cm}}$
16. $7 \times 5 = \underline{\hspace{1cm}}$

17. $3 \times 6 = \underline{\hspace{1cm}}$
18. $8 \times 7 = \underline{\hspace{1cm}}$
19. $6 \times 9 = \underline{\hspace{1cm}}$
20. $5 \times 6 = \underline{\hspace{1cm}}$

21. $9 \times 7 = \underline{\hspace{1cm}}$
22. $6 \times 7 = \underline{\hspace{1cm}}$
23. $2 \times 8 = \underline{\hspace{1cm}}$
24. $10 \times 5 = \underline{\hspace{1cm}}$

25. $4 \times 8 = \underline{\hspace{1cm}}$
26. $5 \times 9 = \underline{\hspace{1cm}}$
27. $7 \times 7 = \underline{\hspace{1cm}}$
28. $10 \times 9 = \underline{\hspace{1cm}}$

29. $7 \times 8 = \underline{\hspace{1cm}}$
30. $9 \times 6 = \underline{\hspace{1cm}}$
31. $0 \times 8 = \underline{\hspace{1cm}}$
32. $5 \times 7 = \underline{\hspace{1cm}}$

33. $6 \times 6 = \underline{\hspace{1cm}}$
34. $8 \times 9 = \underline{\hspace{1cm}}$
35. $7 \times 4 = \underline{\hspace{1cm}}$
36. $1 \times 3 = \underline{\hspace{1cm}}$

37. $4 \times 6 = \underline{\hspace{1cm}}$
38. $3 \times 7 = \underline{\hspace{1cm}}$
39. $9 \times 4 = \underline{\hspace{1cm}}$
40. $5 \times 5 = \underline{\hspace{1cm}}$

41. $10 \times 7 = \underline{\hspace{1cm}}$
42. $10 \times 3 = \underline{\hspace{1cm}}$

2 Find the result.

1.
```
    9
×   8
─────

```

2.
```
    9
×   3
─────

```

3.
```
    7
×   9
─────

```

4.
```
    6
×   1
─────

```

5.
```
    7
×   4
─────

```

6.
```
    4
×   8
─────

```

7.
```
    6
×   6
─────

```

8.
```
    7
×   7
─────

```

9.
```
    6
×   5
─────

```

10.
```
    8
×   5
─────

```

11.
```
    5
×  10
─────

```

12.
```
    7
×   3
─────

```

13.
```
    7
×   5
─────

```

14.
```
    9
×   5
─────

```

15.
```
    9
×   6
─────

```

16.
```
    8
×   9
─────

```

17.
```
    9
×   7
─────

```

18.
```
    4
×   9
─────

```

19.
```
    5
×   0
─────

```

20.
```
    8
×   4
─────

```

21.
```
    7
×  10
─────

```

22.
```
    4
×   6
─────

```

23.
```
    8
×  10
─────

```

24.
```
    0
×   6
─────

```

25.
```
    5
×   4
─────

```

26.
```
    5
×   8
─────

```

27.
```
    6
×   3
─────

```

28.
```
    6
×   7
─────

```

29.
```
    8
×   3
─────

```

30.
```
    6
×   4
─────

```

31.
```
    6
×   9
─────

```

32.
```
    8
×   2
─────

```

33.
```
    5
×   7
─────

```

34.
```
    0
×   7
─────

```

35.
```
    5
×   6
─────

```

36.
```
    7
×   2
─────

```

37.
```
    8
×   7
─────

```

38.
```
    7
×   6
─────

```

39.
```
    9
×   9
─────

```

40.
```
    8
×   6
─────

```

41.
```
    9
×   4
─────

```

42.
```
    4
×   1
─────

```

Factors of a number using arrays

Learn
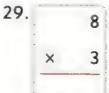
○ **Factor pair** is a group of two numbers we multiply to get a product.

○ Four friends Bassem, Mina, Hanan and Mariam. Each one has 6 identical cards and arranged them in rows of equal number of cards.

Bassem could arrange them in **1** row of **6** cards.

Factors

1 ○ **6**

Factor pair

Mina could arrange them in **2** rows of **3** cards.

Factors

2 ○ **3**

Factor pair

Hanan could arrange them in **3** rows of **2** cards.

Factors

3 ○ **2**

Factor pair
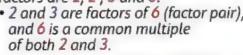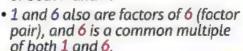
Mariam could arrange them in **6** rows of **1** card.

So, the number 6 can be arranged in different ways into arrays and its factors are 1, 2, 3 and 6.
• 2 and 3 are factors of 6 (factor pair), and 6 is a common multiple of both 2 and 3.
• 1 and 6 also are factors of 6 (factor pair), and 6 is a common multiple of both 1 and 6.
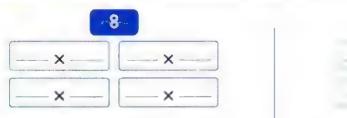
Factors

6 ○ **1**

Factor pair

Check 🔍 Write each factor pair and the factors of each number.

8

_____ × _____   _____ × _____

_____ × _____   _____ × _____

Factors are _____

14

_____ × _____   _____ × _____

_____ × _____   _____ × _____

Factors are _____

Notes for parents

• Help you child know that 2 and 3 are factors of 6, and 6 is a common multiple of both 2 and 3.
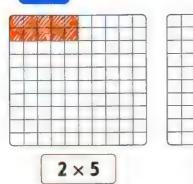
Factors of a number using arrays

1 Write each factor pair and the factors of each number.

a. 16

___ × ___ ___ × ___

___ × ___ ___ × ___

___ × ___

Factors are _____

b. 12

___ × ___ ___ × ___

___ × ___ ___ × ___

___ × ___ ___ × ___

Factors are _____

c. 18

___ × ___ ___ × ___

___ × ___ ___ × ___

___ × ___ ___ × ___

Factors are _____

d. 20

___ × ___ ___ × ___

___ × ___ ___ × ___

___ × ___ ___ × ___

Factors are _____

e. 6

___ × ___ ___ × ___

___ × ___ ___ × ___

Factors are _____

f. 15

___ × ___ ___ × ___

___ × ___ ___ × ___

Factors are _____

g. 9

___ × ___ ___ × ___

___ × ___

Factors are _____

h. 7

___ × ___ ___ × ___

Factors are _____
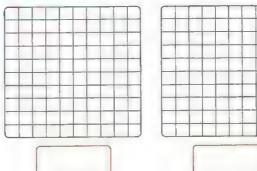
2 How many different arrays can you make with the given number ?
Color the grids to show your work.

a. 10

2 × 5

b. 8

c. 12

d. 15

3 Complete.
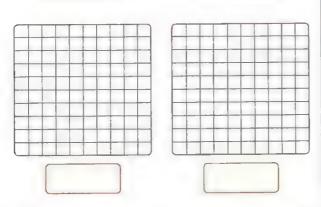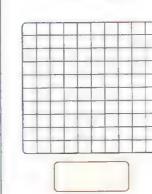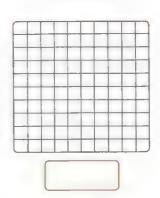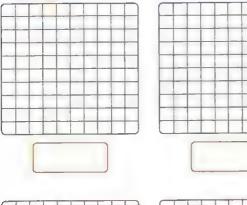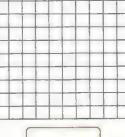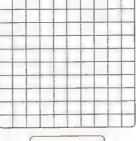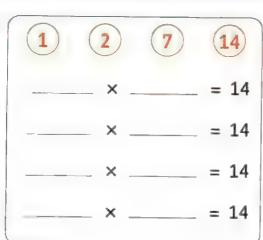
a. The number 6 has _____ factors.

b. The number 11 has _____ factors.

c. The number 10 has _____ factors.

d. The number 12 has _____ factors.

e. The number 5 has _____ factors.

f. The number 18 has _____ factors.

g. The number 16 has _____ factors.

h. The number 20 has _____ factors.

---

4 Complete using the given numbers. Use every number more than one time.

a.

(1) (2) (7) (14)

_____ × _____ = 14

_____ × _____ = 14

_____ × _____ = 14

_____ × _____ = 14
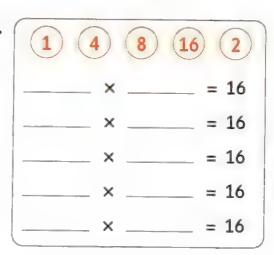
b.

(1) (3) (5) (15)

_____ × _____ = 15

_____ × _____ = 15

_____ × _____ = 15

_____ × _____ = 15

c.

(3) (7) (1) (21)

_____ × _____ = 21

_____ × _____ = 21

_____ × _____ = 21

_____ × _____ = 21

d.

(1) (4) (8) (16) (2)

_____ × _____ = 16

_____ × _____ = 16

_____ × _____ = 16

_____ × _____ = 16

_____ × _____ = 16

Challenge 🎯

5 a. Which number does have one factor pair ? _____

b. Write three numbers where the number of the factors of each is two.

_____ , _____ and _____

Place a smiley face
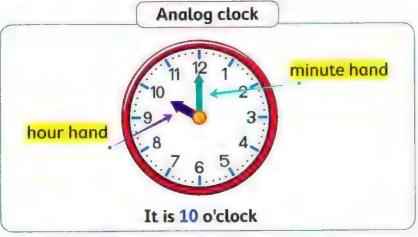
- Time
- Applications on time

Remember

There are 60 minutes in 1 hour.

Analog clock

minute hand

hour hand

It is 10 o'clock

Digital clock

10:00

It is 10 o'clock

10:15

It is quarter past 10

10:30

It is half past 10

10:45

It is quarter to 11

Check — Write the time in two ways.

_____ : _____

It's _____

_____ : _____

It's _____

_____ : _____

It's _____

_____ : _____

It's _____
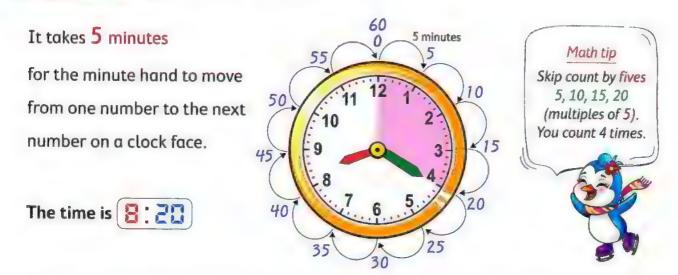
Notes for parents
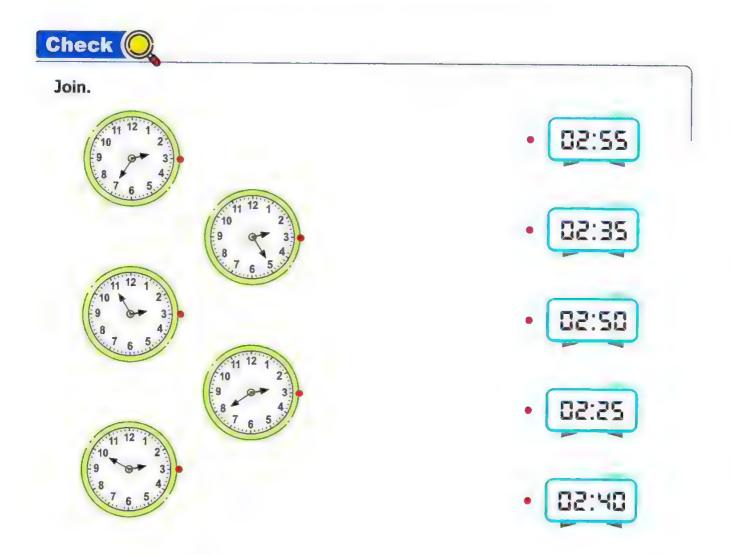
124 • Ask your child where the minute hand and the hour hand point at 4 : 30 , 2 : 15 and 5 : 45.

It takes **5** minutes

for the minute hand to move

from one number to the next

number on a clock face.

The time is `8 : 20`

Math tip

Skip count by fives
5, 10, 15, 20
(multiples of 5).
You count 4 times.

Where does the minute hand point at 8 : 20 ? The minute hand points at the **4**
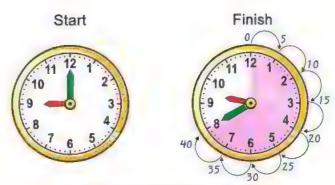
Check

Join.

02:55

02:35

02:50

02:25

02:40

Learn 2 Elapsed time

Rasha started reading at **9 : 00**

She finished reading at **9 : 40**

For how long did she read ?

Start

Finish

She read for **40 minutes.**

You can count by fives as follows :

Start time   End time

0   5   10   15   20   25   30   35   40   45   50   55   60

9:00 9:05 9:10 9:15 9:20 9:25 9:30 9:35 9:40

The elapsed time from **9:00** to **9:40** is **40** minutes.

Check
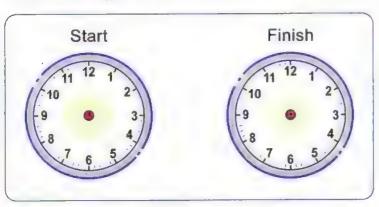
Youssef started swimming
at 5 : 00 and he finished
at 5 : 25
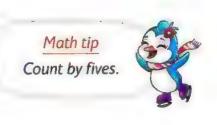
For how long did he swim ?

Start   Finish

Math tip

Count by fives.

He swam for _____ minutes.

• Point out the clock when it shows time to the hour. Ask your child to explain how a clock shows
that an hour has gone by.

- **Time**
- **Applications on time**

From the school book
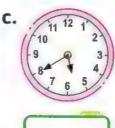
1 Write the time.
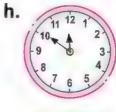
a.

____ : ____

b.

____ : ____

c.

____ : ____

d.

____ : ____

e.

____ : ____

f.

____ : ____

g.

____ : ____

h.

____ : ____

2 Write the time in two ways.

a.

____ : ____

It's _____

b.

____ : ____

It's _____

c.

____ : ____

It's _____

d.

____ : ____

It's _____

e.

____ : ____

It's _____

f.

____ : ____

It's _____

3 Draw the clock hands.

a.

`9:05`

b.

`11:25`

c.

`3:40`

d.

`1:55`

e.

`6:10`

f.

`10:20`

g.

`8:50`

h.

`4:35`
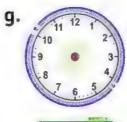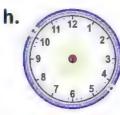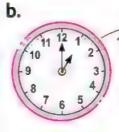
4 Draw the clock hands and write the time.

a.

After
10 minutes

___ : ___   ___ : ___

b.

After
35 minutes

___ : ___   ___ : ___

c.

After
25 minutes

___ : ___   ___ : ___

d.

After
50 minutes

___ : ___   ___ : ___

e.

After 5 minutes

It is _____

[___ : ___]

f.

After 40 minutes

It is _____

[___ : ___]

g.

After 30 minutes

It is _____

[___ : ___]

h.

After 60 minutes

It is _____

[___ : ___]

---
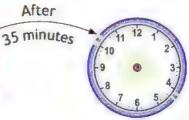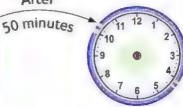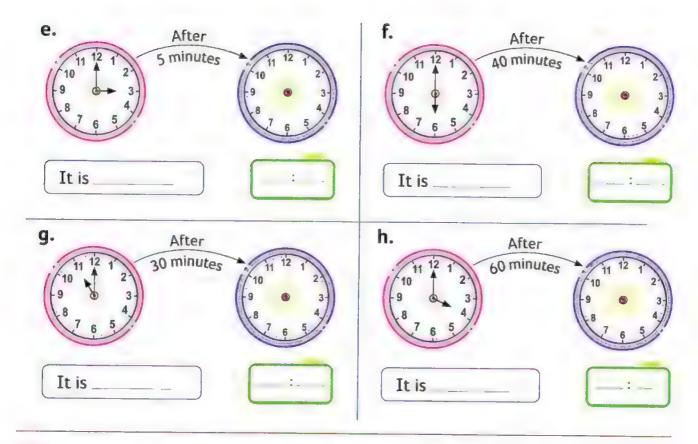
5 If the start time is 03 : 00, answer as the example.

Example :

What number will the minute hand point
to when **35** minutes have passed ? ___**7**___

a. What number will the minute hand point
to when **10** minutes have passed ? _____

b. What number will the minute hand point
to when **25** minutes have passed ? _____

c. What number will the minute hand point
to when **40** minutes have passed ? _____

d. What number will the minute hand point
to when **5** minutes have passed ? _____

e. What number will the minute hand point
to when **60** minutes have passed ? _____

6 Calculate the elapsed time between the two clocks.

a.

Elapsed time _____

b.

Elapsed time _____

c.

Elapsed time _____

d.

Elapsed time _____

e.

`2:00` `2:45`

Elapsed time _____

f.

`10:00` `10:10`

Elapsed time _____

g.

`11:00` `11:05`

Elapsed time _____

h.

`3:00` `4:00`
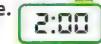
Elapsed time _____

---

7 Answer the following.

a. A football match started at

The first round ended at

For how long did the first round take ?

The first round took _____ minutes.

b. Our English lesson started at

It finished at

For how long did English lesson take ?

English lesson took _____ minutes.

c. 📖 Your mom puts muffins in the oven at **7:00**
When you take them out, the clock
looks like this :

How many minutes did it take to bake the muffins ?

d. 📖 You leave school at **3:00** and when you get home
the clock looks like this :

**How many minutes did it take you
to walk home ?**

e. John wakes up at 7 o'clock.

He gets ready at

How many minutes does he take to get ready ?

He takes _____ minutes.

8 **Draw the hands on the clock to show the time
in each of the following.**

a. Yara started playing tennis at **5:00**

She played for 35 minutes.

What time did she finish ?
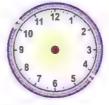
b. 📖 If it takes you 45 minutes to walk home from school and you leave at **3:00**, **what time will it be when you get home ?**

c. The train to Alexandria arrived at **9:00**

It left the station 55 minutes earlier to get to Alexandria.

What time did the train leave the station ?

d. A T.V. show ended at **8:00**

It lasted for half hour.

What time did the T.V. show start ?

Challenge 🎯
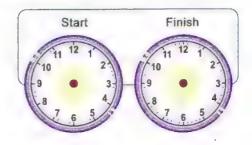
9 Salma's piano lesson begins at **4:15**

It lasts for 30 minutes.
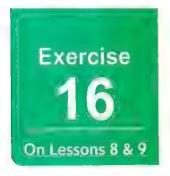
At what time does her lesson end ?

Start   Finish

_____ : _____

Place a smiley face

• **Division**
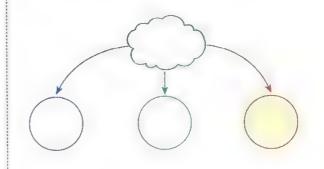
• **Applications on division**

📖 From the school book

1 Draw to show equal groups. Fill in the part – part – whole model. Complete.

a. **9** coins divided among **3** money boxes.

Each money box has _____ coins.
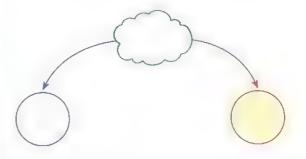
b. **6** pencils divided among **2** pencil cases.
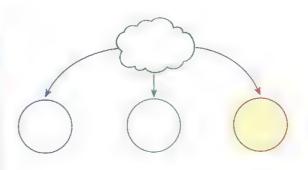
Each pencil case has _____ pencils.

c. **12** oranges divided among **3** plates.
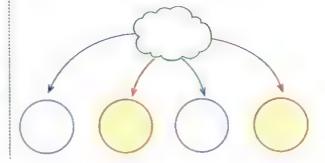
Each plate has _____ oranges.

d. 📖 There are **16** fish that need to be placed in **4** bowls.

Each bowl has _____ fish.
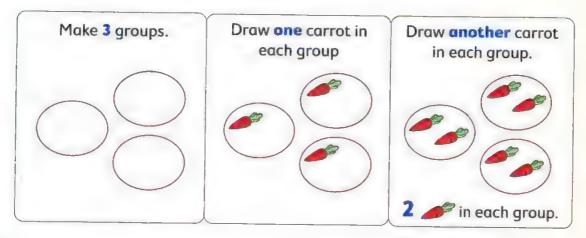
- **Division**
- **Applications on division**

Learn — What is the division?
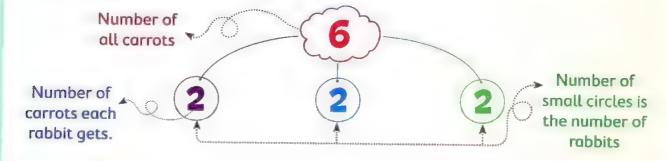
- Division is to separate some things in equal groups.
- To share things equally, you can **divide**.
- Hend has **6** carrots to feed the rabbits.
- There are **3** rabbits.
- How many carrots does each rabbit get ?

Make **3** groups.	Draw **one** carrot in each group	Draw **another** carrot in each group.
		2 🥕 in each group.
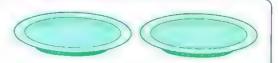
So, each rabbit gets **2** carrots.

- The following model is called a **part – part – whole** to represent the sharing problem (Division).

Number of all carrots

6

Number of carrots each rabbit gets.

2   **2**   **2**

Number of small circles is the number of rabbits

Check 🔍
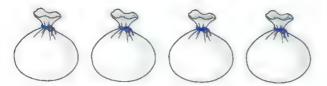
Draw to show 8 eggs divided among 2 plates.
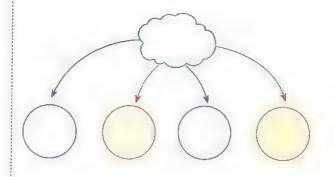
e. **8** marbles divided among **4** bags.
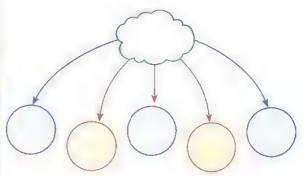
Each bag has _____ marbles.

f. 📖 Sameh is preparing gift baskets. He has **20** oranges that need to be divided equally between **5** baskets.
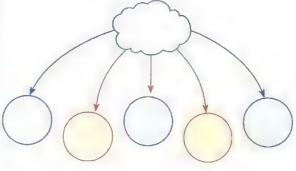
Each basket has _____ oranges.

g. **15** toys divided among **5** boxes.
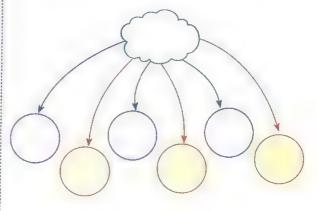
Each box has _____ toys.

h. 📖 The teacher has **36** crayons to share equally between **6** students.
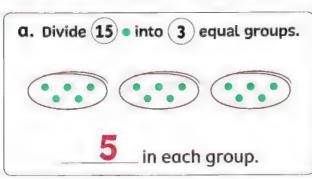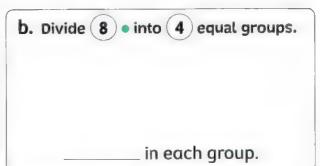
Each cup has _____ crayons.
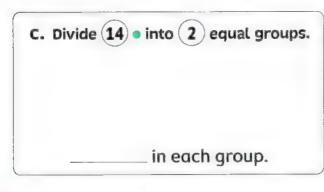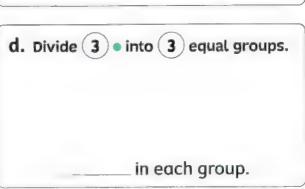
2 Draw to show your work.
Write how many in each group. The first one is done for you.

a. Divide (15) • into (3) equal groups.

_____5_____ in each group.

b. Divide (8) • into (4) equal groups.

_____ in each group.

c. Divide (14) • into (2) equal groups.

_____ in each group.

d. Divide (3) • into (3) equal groups.

_____ in each group.
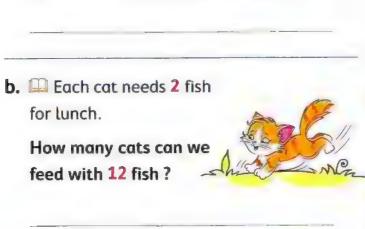
3 Solve the following problems.
You can draw a mathematical picture or use counters to help you.

a. Rania has **18** eggs and wants to put them equally in **3** plates. How many eggs are there in each plate?

_____

_____

b. 📖 Each cat needs **2** fish for lunch.

How many cats can we feed with **12** fish?

_____

_____

Work area

c. Bassem has **28** stamps.
He put an equal number
of his stamps on each
of **4** pages.

How many stamps are on each page ?

_____

_____

d. 📖 Each ibis will eat **3** worms. You have

18 worms.

How many ibis can be fed ?

_____

_____

e. 📖 Each jackal must eat **6** insects.
There are **24** insects.

**How many jackals
can be fed ?**

_____

_____

f. A class has **20** pupils.
If they are divided into
rows of **5** pupils each.

How many rows are there ?

_____

_____

g. 📖 Each crocodile wants to eat **5** fish.
There are **25** fish.

**How many crocodiles
can be fed ?**

_____

_____

_____

h. Shady saw some

horses in a park

He counted **36** legs.

How many horses did Shady see ?

_____

_____

Challenge 🎯

4 Amgad has 13 lemons.

**Can he put all of them in two boxes, each of them has an equal number
of lemons ? Explain.**

_____

Place
a smiley
face

The relation between multiplication and division

Learn 1 Division symbol

- There are 12 sweets.
- You want to divide them among 3 groups and find the sweets number in each group.

- There are 4 sweets in each group.
- When you divided them in equal groups, you can express it by the division sentence.

What you say : 12 divided by 3 equals 4

What you write : $12 \div 3 = 4$ → This is a division sentence

Division symbol

Quotient : The answer of the division problem.

Check

Write the result of each of the following.

a. $16 \div 2 =$ _____

b. $20 \div 5 =$ _____

c. $24 \div 3 =$ _____

d. $10 \div 2 =$ _____

e. $28 \div 4 =$ _____

f. $50 \div 10 =$ _____

g. $24 \div 6 =$ _____

h. $64 \div 8 =$ _____

i. $42 \div 7 =$ _____

Notes for parents

• Tell your child that the answer of division is called "Quotient".

Relation between multiplication and division

○ Nader drew 12 ✓s in two ways.

○ He wrote two multiplication sentences about his picture.

$3 \times 4 = 12$ **"Think:** 3 groups of 4 is 12**"**

$4 \times 3 = 12$ **"Think:** 4 groups of 3 is 12**"**

○ He can also write two division sentences about his picture.

$12 \div 3 = 4$ **"Think:** 12 divided into 3 groups of 4**"**

$12 \div 4 = 3$ **"Think:** 12 divided into 4 groups of 3**"**

○ These four number sentences form a <mark>fact family</mark> of the numbers 3 , 4 and 12.

> **Vocabulary**
> Fact family
> It is a set of related multiplication and division number sentences.

$3 \times 4 = 12$

$4 \times 3 = 12$

Example ①

Complete.

a. $15 \div$ _____ $= 5$

b. _____ $\div 4 = 6$

c. $6 \times$ _____ $= 30$

d. _____ $\times 2 = 18$

Solution ✓

a. $15 \div \underline{\ \ 3\ \ } = 5$ [Hint : $5 \times 3 = 15$]
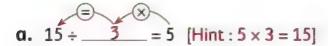
b. $\underline{\ \ 24\ \ } \div 4 = 6$ [Hint : $6 \times 4 = 24$]

c. $6 \times \underline{\ \ 5\ \ } = 30$

d. $\underline{\ \ 9\ \ } \times 2 = 18$

Notes for parents
• Remind your child of the commutative property of multiplication.

Example ②

Write the suitable sign ">, = or <".

a. $35 \div 7$ ☐ 5×7

b. 4×2 ☐ $42 \div 6$

c. $28 \div 4$ ☐ $4 + 4$

d. $10 \div 10$ ☐ 10×0

e. 2×3 ☐ $24 \div 4$

f. 4×5 ☐ 10×2

Solution ✓

a. $\overset{5}{35 \div 7}$ $<$ $\overset{35}{5 \times 7}$

b. $\overset{8}{4 \times 2}$ $>$ $\overset{7}{42 \div 6}$

c. $\overset{7}{28 \div 4}$ $<$ $\overset{8}{4 + 4}$

d. $\overset{1}{10 \div 10}$ $>$ $\overset{0}{10 \times 0}$

e. $\overset{6}{2 \times 3}$ $=$ $\overset{6}{24 \div 4}$

f. $\overset{20}{4 \times 5}$ $=$ $\overset{20}{10 \times 2}$

Check 🔍

Join the equal answers.

a. $18 \div 3$

b. $16 \div 2$

c. $8 \div 4$

d. $5 + 5$

e. 1×4

$10 \div 5$

2×3

$4 \div 1$

$4 + 4$

$20 \div 2$

The relation between multiplication and division

1 Find the result.

a. $8 \div 2 =$ _____

b. $12 \div 6 =$ _____

c. $15 \div 3 =$ _____

d. $16 \div 4 =$ _____

e. $40 \div 5 =$ _____

f. $20 \div 2 =$ _____

g. $40 \div 10 =$ _____

h. $21 \div 7 =$ _____

i. $24 \div 4 =$ _____

j. $42 \div 6 =$ _____

k. $12 \div 3 =$ _____

l. $8 \div 1 =$ _____

m. $72 \div 8 =$ _____

n. $56 \div 7 =$ _____

o. $10 \div 10 =$ _____

p. $49 \div 7 =$ _____

q. $35 \div 5 =$ _____

r. $36 \div 6 =$ _____

s. $5 \div 5 =$ _____

t. $50 \div 5 =$ _____

u. $36 \div 9 =$ _____

v. $4 \div 1 =$ _____

w. $24 \div 6 =$ _____

x. $27 \div 3 =$ _____

y. $28 \div 4 =$ _____

z. $18 \div 3 =$ _____

2 Choose the correct answer.

a. $24 \div 3 =$ _____ .   (5 or 6 or 7 or 8)

b. $45 \div 5 =$ _____   (6 or 7 or 8 or 9)

c. $36 \div 4 =$ _____   (9 or 8 or 7 or 6)

d. $70 \div 7 =$ _____   (4 or 6 or 8 or 10)

e. $18 \div 6 =$ _____   (2 or 3 or 4 or 5)

f. $2 \div 2 =$ _____ .   (0 or 1 or 2 or 3)

g. How many groups of 5 are in 35 ?   (7 or 8 or 9 or 10)

h. How many groups of 3 are in 15 ?   (4 or 3 or 5 or 1)

i. If 10 crayons divided among 5 boxes. Then, each box has _____ crayons.

                                                                        (1 or 2 or 3 or 4)

j. If 21 apples divided among 3 plates. Then, each plate has _____ apples.

                                                                         (5 or 6 or 7 or 8)

---

3 Put the suitable sign ">, = or <".

a. $32 \div 8$ ◯ $8 \div 2$ b. $27 \div 3$ ◯ $3 + 3 + 3 + 3$

c. $54 \div 6$ ◯ 0×9 d. 6×1 ◯ $6 \div 1$

e. 8×8 ◯ $8 \div 8$ f. 4×10 ◯ $40 \div 5$

g. 6×6 ◯ 4×9 h. $25 \div 5$ ◯ $40 \div 5$

4 Put (✓) to the correct statement or (X) to the incorrect statement.

a. $15 \div 3 = 5$ (   )   b. $28 \div 4 = 6$ (   )

c. $7 \div 7 = 7$ (   )   d. $8 \div 1 = 8$ (   )

e. $24 \div 4 = 24 \div 8$ (   )   f. $12 \div 4 = 24 \div 8$ (   )

g. $8 \div 8 = 5 \div 5$ (   )   h. $36 \div 4 > 40 \div 4$ (   )

i. $6 \div 3 > 2$ (   )   j. $10 \div 5 < 2$ (   )

k. If Sara has 20 lemons and she wants to put them equally in 5 bags.
Then, there are 4 lemons in each bag.   (   )

l. If A class has 24 pupils and they are divided into rows of 4 pupils each.
Then, there are 5 pupils in each row.   (   )

---

5 Complete.

a. $4 \times \boxed{} = 12$

$12 \div 4 = \boxed{}$

b. $2 \times \boxed{} = 14$

$14 \div 2 = \boxed{}$

c. $3 \times \boxed{} = 27$

$27 \div 3 = \boxed{}$

d. $7 \times \boxed{} = 21$

$21 \div 7 = \boxed{}$

e. $6 \times \boxed{} = 54$

$54 \div 6 = \boxed{}$

f. $\boxed{} \times 4 = 32$

$32 \div 4 = \boxed{}$

---

6 Find the missing number.

a. $\boxed{} \div 3 = 4$

b. $\boxed{} \div 6 = 5$

c. $\boxed{} \div 5 = 3$

d. $7 \times \boxed{} = 28$

e. $\boxed{} \times 8 = 64$

f. $2 \times \boxed{} = 18$

g. $30 \div \boxed{} = 6$

h. $56 \div \boxed{} = 8$

i. $9 \div \boxed{} = 1$
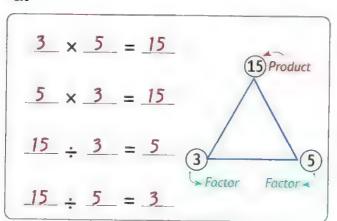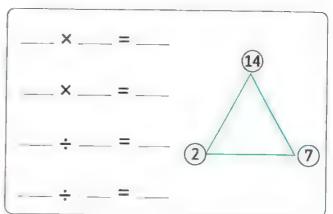
7 Write the fact family for each set of numbers. The first one is done for you.

a.

$\underline{3} \times \underline{5} = \underline{15}$

$\underline{5} \times \underline{3} = \underline{15}$

$\underline{15} \div \underline{3} = \underline{5}$

$\underline{15} \div \underline{5} = \underline{3}$

(15) Product
(3) Factor (5) Factor

b.

$\underline{} \times \underline{} = \underline{}$

$\underline{} \times \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

(14)
(2) (7)

c.

$\underline{} \times \underline{} = \underline{}$

$\underline{} \times \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

(27)
(3) (9)

d.

$\underline{} \times \underline{} = \underline{}$

$\underline{} \times \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

$\underline{} \div \underline{} = \underline{}$

(24)
(4) (6)
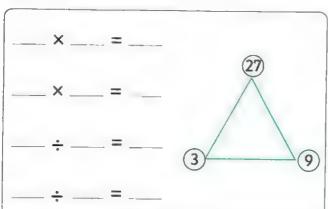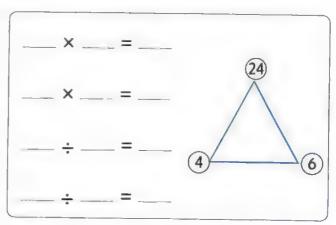
8 Write the other facts from each family.

a. $4 \times 9 = 36$

b. $40 \div 5 = 8$

c. $6 \times 3 = 18$

d. $2 \times 8 = 16$

e. $13 \div 1 = 13$

f. $14 \div 2 = 7$
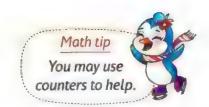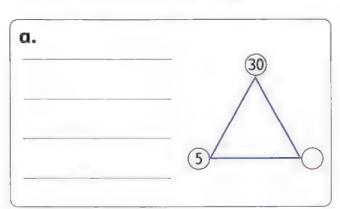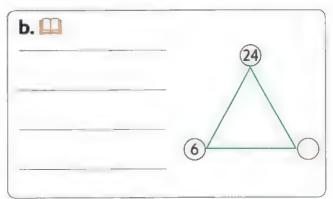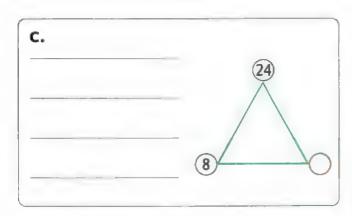
9 Find the missing factor in each triangle below.
Then write the four numbers sentences that
go with the fact family.
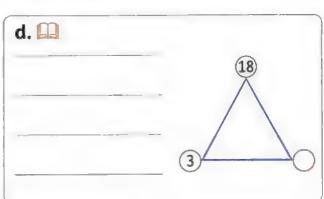
Math tip
You may use
counters to help.

a.

(30)

(5) ◯

b. 📖

(24)

(6) ◯

c.

(24)

(8) ◯

d. 📖

(18)

(3) ◯

e. 📖

(28)

(4) ◯

f.

(8)

(2) ◯

g. 📖

(21)

(7) ◯

h.

(30)

(3) ◯
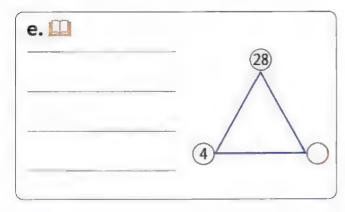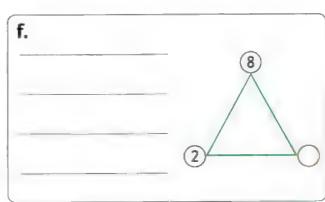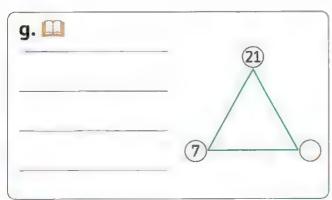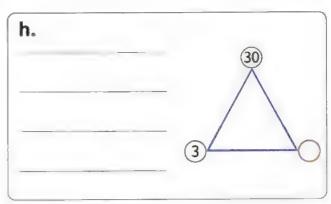
10 Choose which number sentence is not included in the same fact family.

a.

9 × 4 = 36

○ 4 × 9 = 36

○ 36 ÷ 4 = 9

○ 36 ÷ 6 = 6

○ 36 ÷ 9 = 4

b.

18 ÷ 3 = 6

○ 3 × 6 = 18

○ 18 ÷ 6 = 3

○ 6 × 3 = 18

○ 9 × 2 = 18

c.

24 ÷ 6 = 4

○ 4 × 6 = 24
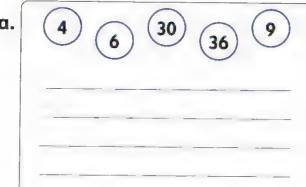
○ 24 ÷ 3 = 8
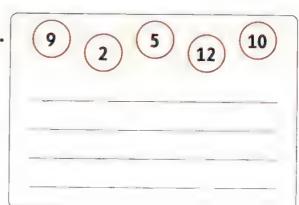
○ 6 × 4 = 24

○ 24 ÷ 4 = 6
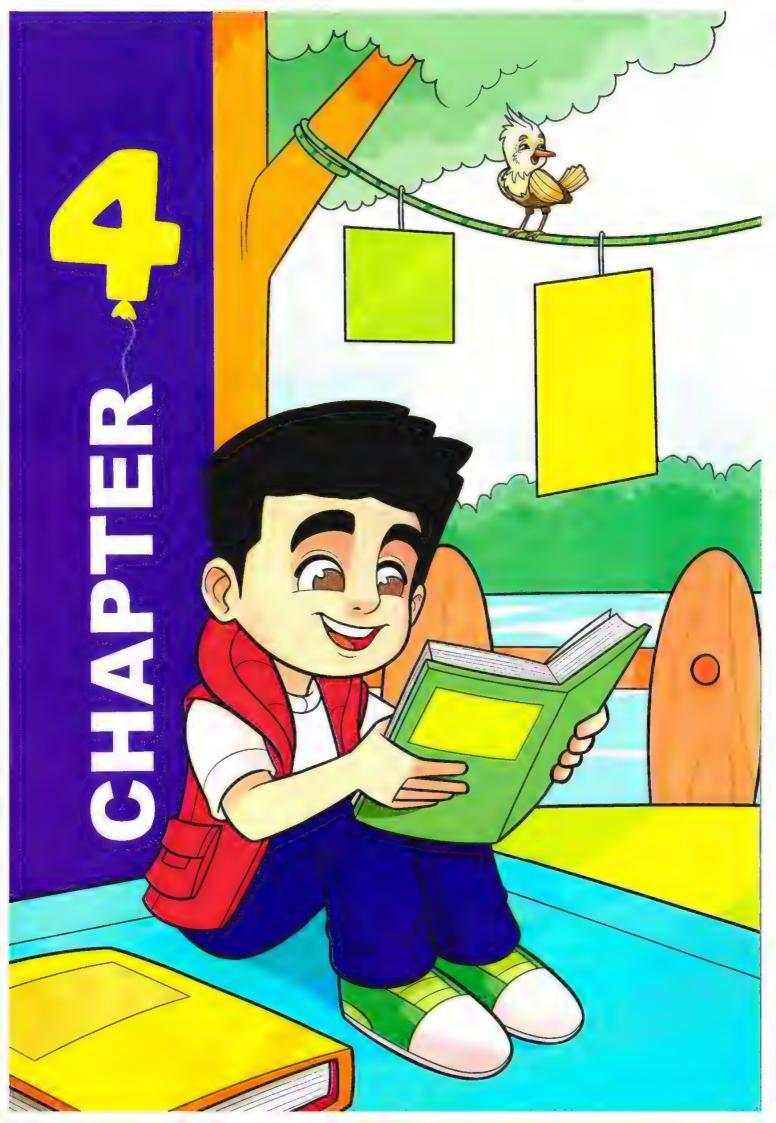
Challenge
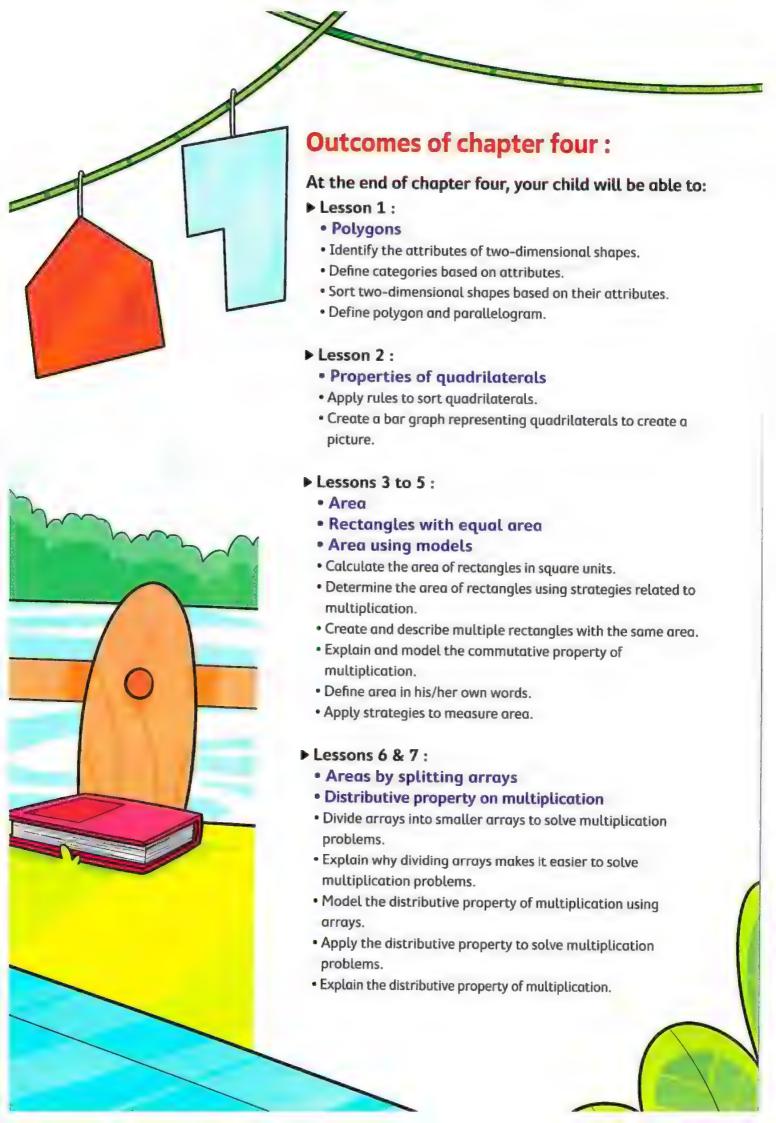
11 Choose the three numbers that can make a fact family.
Then write the four related multiplication and division sentences.

a.

4   30   9
  6   36

_____

_____

_____

_____

b.

9   5   10
  2   12

_____

_____

_____

_____

Place
a smiley
face

147

CHAPTER 4

Outcomes of chapter four :

At the end of chapter four, your child will be able to:

▶ **Lesson 1 :**
  - **Polygons**
  - Identify the attributes of two-dimensional shapes.
  - Define categories based on attributes.
  - Sort two-dimensional shapes based on their attributes.
  - Define polygon and parallelogram.

▶ **Lesson 2 :**
  - **Properties of quadrilaterals**
  - Apply rules to sort quadrilaterals.
  - Create a bar graph representing quadrilaterals to create a picture.

▶ **Lessons 3 to 5 :**
  - **Area**
  - **Rectangles with equal area**
  - **Area using models**
  - Calculate the area of rectangles in square units.
  - Determine the area of rectangles using strategies related to multiplication.
  - Create and describe multiple rectangles with the same area.
  - Explain and model the commutative property of multiplication.
  - Define area in his/her own words.
  - Apply strategies to measure area.

▶ **Lessons 6 & 7 :**
  - **Areas by splitting arrays**
  - **Distributive property on multiplication**
  - Divide arrays into smaller arrays to solve multiplication problems.
  - Explain why dividing arrays makes it easier to solve multiplication problems.
  - Model the distributive property of multiplication using arrays.
  - Apply the distributive property to solve multiplication problems.
  - Explain the distributive property of multiplication.

Polygons

Learn 1 Polygons

Polygons Do not have gaps or curves

o **Polygons** are closed two-dimensional figures.

o Closed figures are shapes do not have any gaps or curves between the lines that make it.

Examples :

Polygons

Not Polygons

Curve

Curved figure

Gap

3D-shape

Check

Are the following figures polygons ? Circle the polygons.
Explain why or why not.
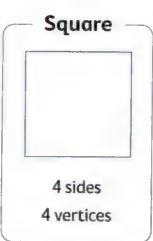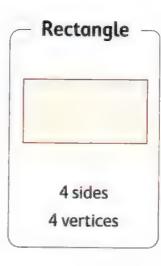
Notes for parents
• Let your child recognize that three-dimensional shapes are not polygons.
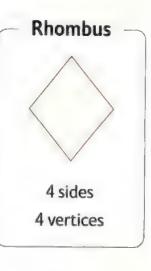
Triangle

3 sides
3 vertices

Square

4 sides
4 vertices

Rectangle

4 sides
4 vertices

Rhombus

4 sides
4 vertices

Parallelogram

4 sides
4 vertices

Trapezium

4 sides
4 vertices

Pentagon

5 sides
5 vertices

Hexagon

6 sides
6 vertices

Heptagon

7 sides
7 vertices

Octagon

8 sides
8 vertices

Circle

0 sides
0 vertices

Note

The number
of sides
= The number
of vertices

• Ask your child to count the sides and vertices of each shape and decide if it is a polygon or not.

2D means two-dimensional figures.

Identify each 2D shape, and write the number of sides and vertices.

a.

Sides ☐
Vertices ☐

Name : _____

b.

Sides ☐
Vertices ☐

Name : _____

c.

Sides ☐
Vertices ☐

Name : _____

d.

Sides ☐
Vertices ☐

Name : _____

e.

Sides ☐
Vertices ☐

Name : _____

f.

Sides ☐
Vertices ☐

Name : _____

g.

Sides ☐
Vertices ☐

Name : _____

h.

Sides ☐
Vertices ☐

Name : _____

i.

Sides ☐
Vertices ☐

Name : _____

j.

Sides ☐
Vertices ☐

Name : _____
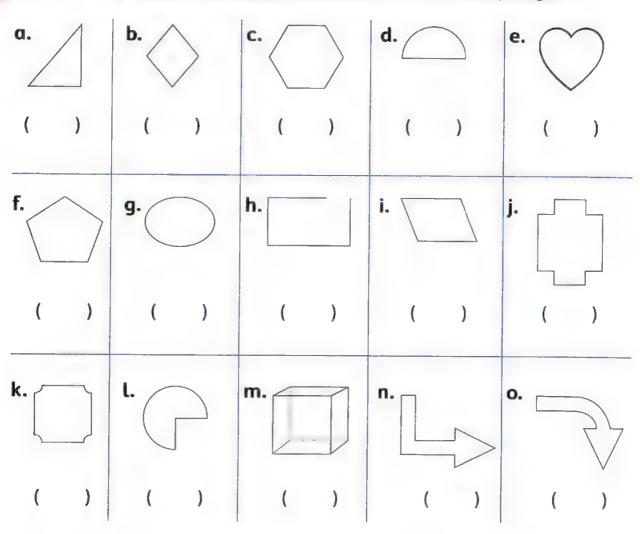
Notes for parents
• Ask your child how many sides or vertices the octagon has.(8), is the octagon a polygon ?
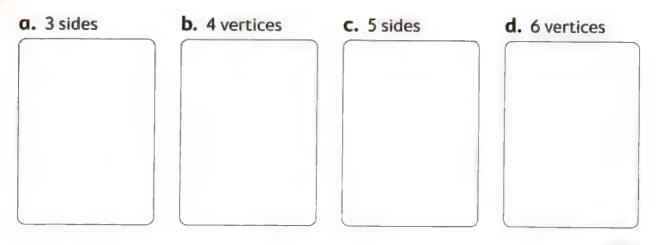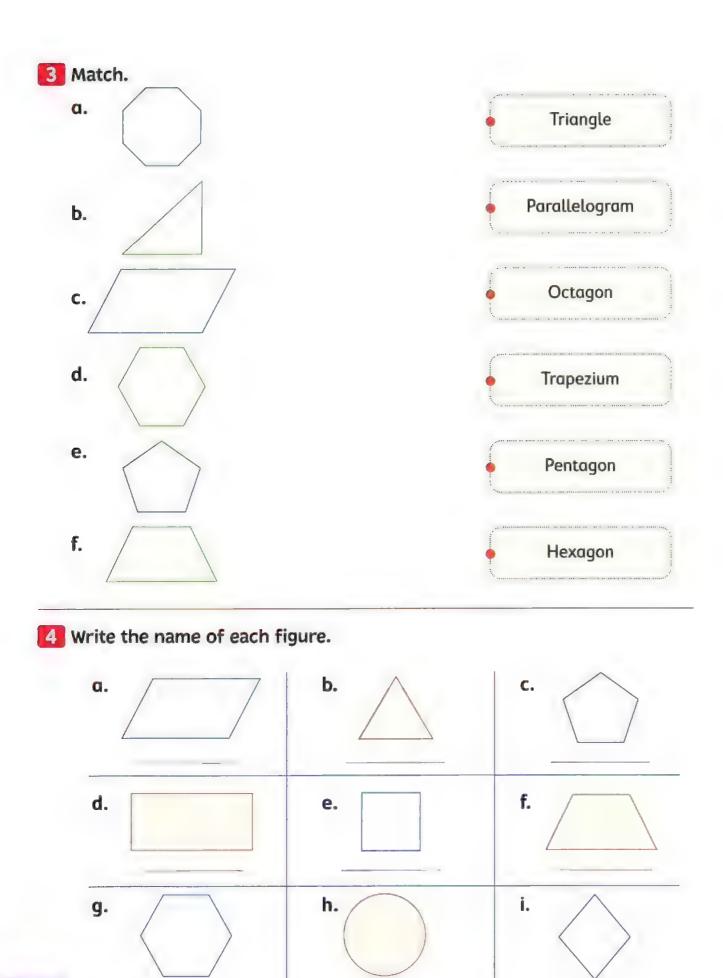
Polygons

1 Put (✓) if the shape is a polygon , and put (✗) if it is not polygon.

a.	b.	c.	d.	e.
( )	( )	( )	( )	( )
f.	g.	h.	i.	j.
( )	( )	( )	( )	( )
k.	l.	m.	n.	o.
( )	( )	( )	( )	( )

2 Draw a polygon with.

a. 3 sides	b. 4 vertices	c. 5 sides	d. 6 vertices

3 Match.

a. (octagon)

b. (right triangle)

c. (parallelogram)

d. (hexagon)

e. (pentagon)

f. (trapezium)

● Triangle

● Parallelogram

● Octagon

● Trapezium

● Pentagon

● Hexagon

---

4 Write the name of each figure.

a. (parallelogram) ___	b. (triangle) ___	c. (pentagon) ___
d. (rectangle) ___	e. (square) ___	f. (trapezium) ___
g. (hexagon) ___	h. (circle) ___	i. (rhombus) ___
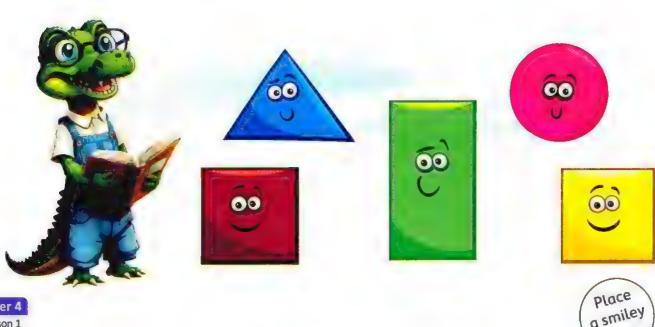
5 Complete the table.
Check if the shape is a polygon or not.

Shape	Name	Attributes		Polygon
		Number of sides	Number of vertices	

6 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. A polygon is an open two-dimensional figure.   (   )

b. The hexagon has 6 sides.   (   )

c. A circle is a polygon.   (   )

d. The parallelogram is a polygon.   (   )

e. △ is called a triangle.   (   )

f. The pentagon has more than 5 sides.   (   )

g. Any polygon does not have gaps or curves.   (   )

h. In any polygon : the number of sides = the number of vertices.   (   )

---

7 Complete.

a. The triangle has _____ sides and _____ vertices.

b. The polygon which has _____ vertices is called octagon.

c. The pentagon has _____ vertices and _____ sides.

d. The polygon which has _____ sides is called heptagon.

e. The _____ has 6 sides.

f. The _____ has 7 vertices.

Place a smiley face

Properties of quadrilaterals
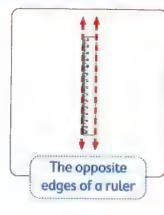
Learn Quadrilateral and parallelogram
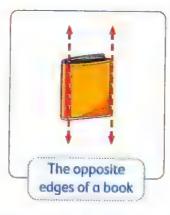
o A **quadrilateral** is a polygon with 4 straight sides and 4 vertices.

o A **parallelogram** is a quadrilateral shape (has four sides) that has each two opposite sides equal in length and parallel.

4 Vertices

4 Sides
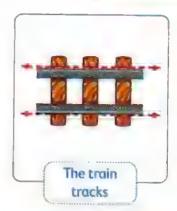
> The blue lines are equal in length and parallel to each other and the red lines are equal in length and parallel to each other.

Examples for parallel lines :

The opposite edges of a ruler

The opposite edges of a book

The train tracks

Parallel lines can go on forever and never intersect.

Check

Color the parallelogram of each.
Explain why or why not.

> All rectangles, squares and rhombuses are also parallelograms.

Notes for parents
• Let your child recognize that rectangles, squares and rhombuses are also parallelograms.

Examples for quadrilaterals :
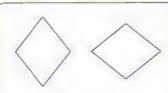
Parallelogram
○ 2 pairs of parallel sides
○ 2 pairs of equal sides
○ 4 vertices

Rectangle
○ 2 pairs of parallel sides
○ 2 pairs of equal sides
○ 4 similar vertices
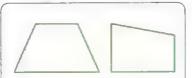
Rhombus
○ 2 pairs of parallel sides
○ 4 equal sides
○ 4 vertices
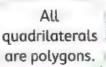
Square
○ 2 pairs of parallel sides
○ 4 equal sides
○ 4 similar vertices

Trapezium
○ exactly 1 pair of parallel sides
○ lengths of sides may not be the same
○ 4 vertices

All quadrilaterals are polygons.

Check

Match each property to all suitable quadrilaterals.

a. 2 pairs of parallel sides

b. 4 equal sides

1. 2. 3. 4. 5.

c. Exactly 1 pair of parallel sides

d. 4 vertices similar
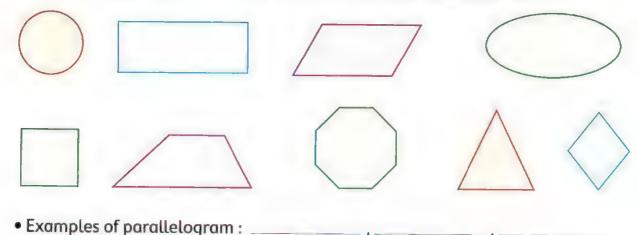
Notes for parents
• Ask your child to mention examples for quadrilaterals and draw more quadrilateral and define it.

Properties of quadrilaterals
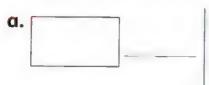
1 Cross out the shape that does not show a parallelogram.
Explain why , write the examples that show a parallelogram.

- Examples of parallelogram : _____ , _____ , _____

---

2 Write a name for each quadrilateral.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

---
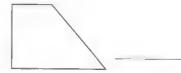
3 Choose the correct answer.

a. The quadrilateral has _____ vertices.   (1 or 2 or 3 or 4)

b. The parallelogram has _____ pairs of equal sides.   (1 or 2 or 3 or 4)

c. The square has _____ equal sides.   (1 or 2 or 3 or 4)
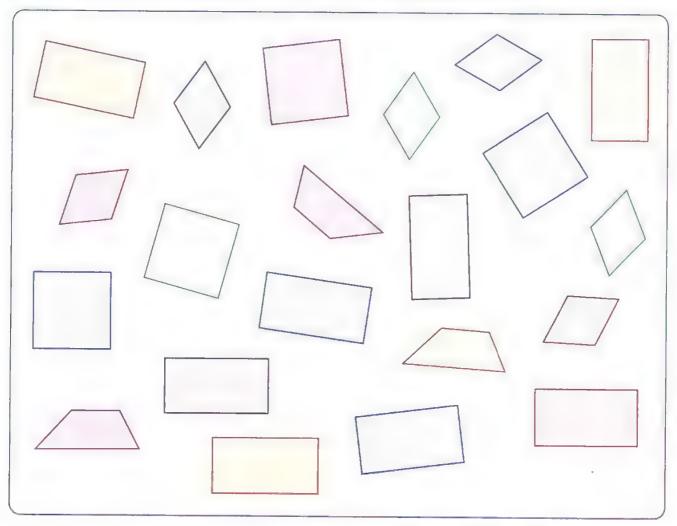
d. The rectangle has _____ similar vertices.   (1 or 2 or 3 or 4)

e. The trapezium has exactly _____ pair of parallel sides.   (1 or 2 or 3 or 4)

f. The rhombus has _____ vertices.   (1 or 2 or 3 or 4)
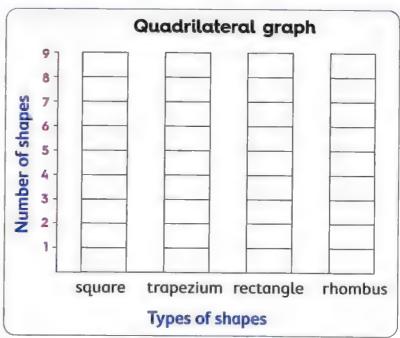
4 **Complete.** (write the name of the shape)

a. The quadrilateral which has only 1 pair parallel sides is called _____

b. The polygon which has 4 sides is called _____

c. The quadrilateral which has 4 equal sides and 4 similar vertices is called _____

d. The quadrilateral which has 4 equal sides and 4 not similar vertices is called _____

e. The quadrilateral which has 4 similar vertices and 4 not equal sides is called _____

---

5 **Put (✓) to the correct statement or (X) to the incorrect statement.**

a. The quadrilateral is a polygon which has 4 sides.   (   )

b. The parallelogram has exactly 1 pair of parallel sides.   (   )

c. The square has 4 similar vertices.   (   )

d. The rectangle's vertices are not similar.   (   )

e. The rhombus has 2 pairs of parallel sides.   (   )

f. The trapezium has more than 1 pair of parallel sides.   (   )

g. The circle is a polygon which has no vertices.   (   )

h. The rhombus has 4 similar vertices.   (   )

i. The square has 2 pairs of parallel sides.   (   )

j. All rectangles are parallelograms.   (   )

6 Use the following figures to fill in the bar graph below.

From the graph :

a. Which quadrilateral is the most ? _____

b. Which quadrilateral is the least ? _____

c. How many parallelograms ?

_____

Quadrilateral graph

Number of shapes

9
8
7
6
5
4
3
2
1

square   trapezium   rectangle   rhombus

Types of shapes

Place a smiley face

- **Area**
- **Rectangles with equal area**
- **Area using models**

📝 Learn 1 Area

- Area is the number of square units needed to cover the surface of a figure.

- A square unit is a square with a side length of 1 unit and it is the unit used to measure area.

- You can count or multiply square units to find area.
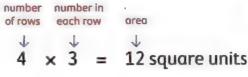
Counting strategy
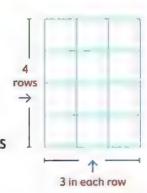
To find area of a rectangle, count the squares inside the rectangle.

Area = 12 square units

1	2	3
4	5	6
7	8	9
10	11	12

Multiplying strategy (Array)

To find area of rectangle, multiply the number of rows by the number in each row.

number of rows   number in each row   area

$$4 \times 3 = 12 \text{ square units}$$

4 rows →

3 in each row
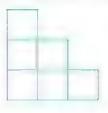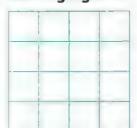
Example 1

Find the area of each of the following figures.

a.

b.

c.

Solution ✓

a.

1		
2	3	
4	5	6

Area = 6 ☐

b.

Area = 4 × 4 = 16 ☐

c.
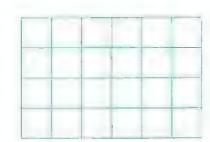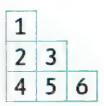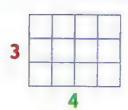
Area = 4 × 6 = 24 ☐

Notes for parents
- Let your child know that there are many strategies to find the area, let him/her discover another strategy.
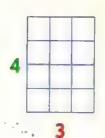
Learn 2 Rectangles with equal area

• There are more than one rectangle that look different but have the same area.

3 rows of **4**

Area = **3** × **4** = 12 square units

4 rows of **3**
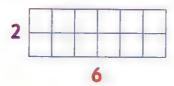
Area = **4** × **3** = 12 square units

Commutative property of multiplication
$3 \times 4 = 4 \times 3$

2 rows of **6**

Area = **2** × **6** = 12 square units

Example 2

Draw on the grid rectangles with an area of 6 square units.

Solution ✓

To draw rectangles with an area of 6 square units search for 2 numbers their product equals 6. You will find :
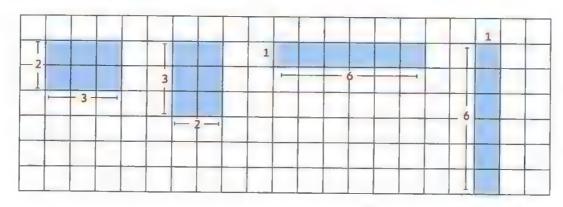
$2 \times 3 = 6$ $3 \times 2 = 6$ $1 \times 6 = 6$ $6 \times 1 = 6$
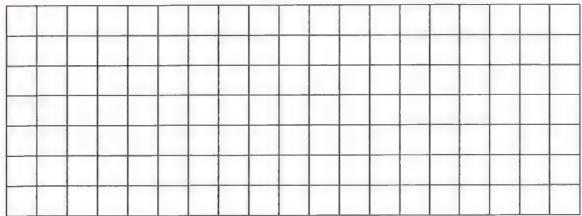
You can draw 4 rectangles.

• Tell your child that area is a part of our daily life it can be used in : purchasing a rug, creating a football field, painting a wall, or laying tiles on a floor.

1. How many square units were used to make these figures ?

_____ rows

_____ in each row

Area = ☐ square units

_____ rows

_____ in each row

Area = ☐ square units

_____ rows

_____ in each row

Area = ☐ square units

Area = _____ ☐

Area = _____ ☐

Area = _____ ☐

2. Draw more rectangles have the same area of 10 square units.

Notes for parents
• Help your child calculate the area of each figure using different strategies such as : divide each figure into many parts and calculate the area of each part and combine them all or count the squares one by one.

Learn 3 Area using models

- To calculate the area of a rectangle or a square using **models**, you can use the **dimensions** of the figure.

- Dimensions are calculated by the number of rows and the number of columns of the rectangle.

For example :

5 columns
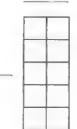
Area of the rectangle = **3** × **5** = $\boxed{15}$ square units

3 rows
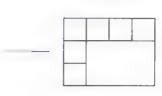
Check
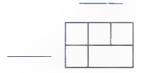
Calculate the total area of each figure.

Area = ——— × ———

= ——— square units

Area = ——— × ———

= ——— square units

Area = ——— × ———

= ——— square units

Area = ——— × ———
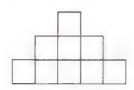
= ——— square units

• **Area**
• **Rectangles with equal area**
• **Area using models**

From the school book
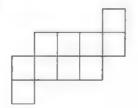
First : Exercises on area
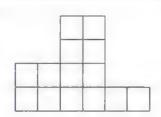
1 Calculate the area of each of the following.

a.

Area = _____ ☐

b.

Area = _____ ☐

c.

Area = _____ ☐

d.

Area = _____ ☐

e.

Area = _____ ☐

f.

Area = _____ ☐

g. 📖

Area = _____ ☐

h. 📖

Area = _____ ☐

i.

$\frac{1}{2}$

Area = _____ ☐

j.

Area = _____ × _____

= _____ ☐

k.

Area = _____ × _____

= _____ ☐

l.

Area = _____ × _____

= _____ ☐
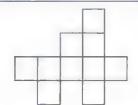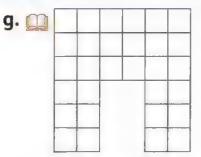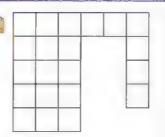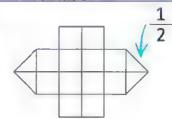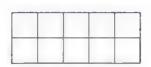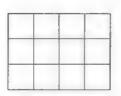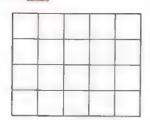
2 Calculate the area of each figure.

a. 📖

Area = ———— ☐

b. 📖

Area = ———— ☐

c.

Area = ———— ☐

d.

Area = ———— ☐

e. 📖

Area = ———— ☐

f.
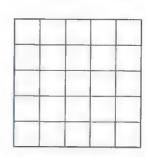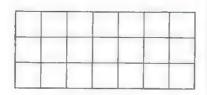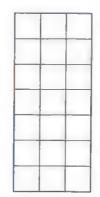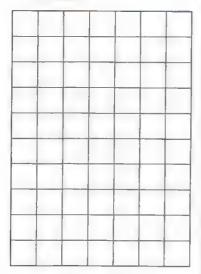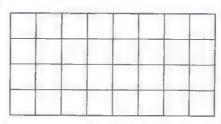
Area = ———— ☐

g. 📖
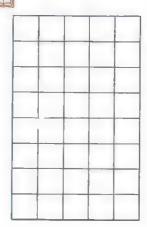
Area = ———— ☐

h. 📖
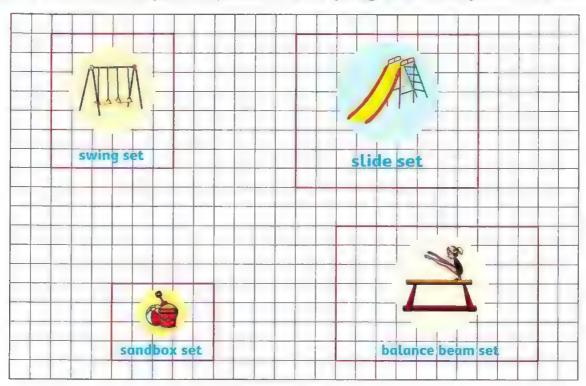
Area = ———— ☐

i. 📖

Area = ———— ☐

3 Here are some things were placed in your playground. Complete the following.
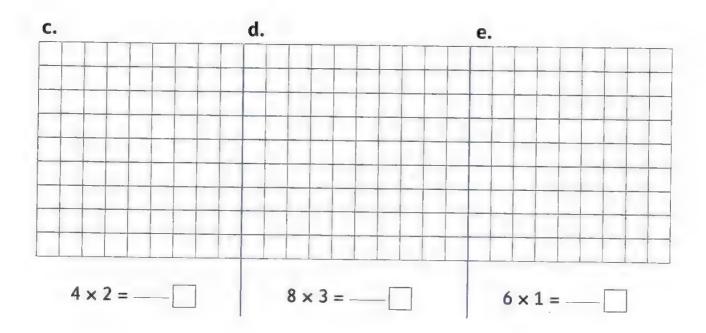
    a. The area of swing set = —————— × —————— = —————— square units.

    b. The area of slide set = —————— × —————— = —————— square units.

    c. The area of sandbox set = —————— × —————— = —————— square units.

    d. The area of balance beam set = —————— × —————— = —————— square units.
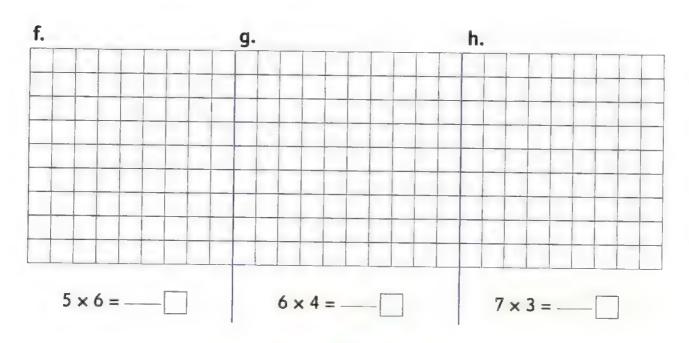
4 Use grid to draw a rectangle represents each of the following sentences and calculate the area as the example.

    Example :   **a.**   **b.**

$3 \times 5 = \underline{\textit{15}}\ \square$ $2 \times 7 = \underline{\hspace{1cm}}\ \square$ $4 \times 5 = \underline{\hspace{1cm}}\ \square$

c.

d.

e.

$4 \times 2 =$ ——— ☐

$8 \times 3 =$ ——— ☐

$6 \times 1 =$ ——— ☐

f.

g.

h.

$5 \times 6 =$ ——— ☐

$6 \times 4 =$ ——— ☐

$7 \times 3 =$ ——— ☐
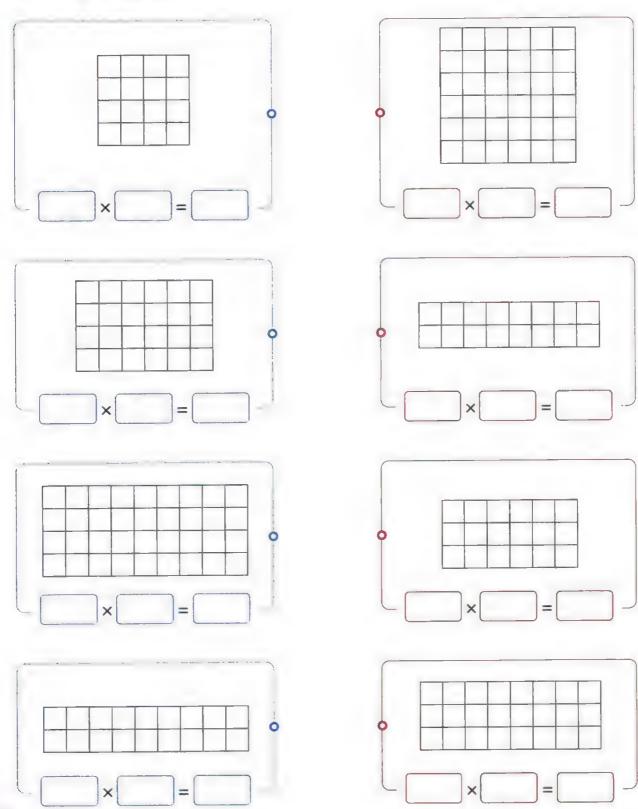
Second : Exercises on rectangles with equal area
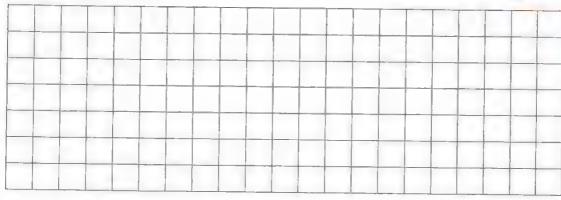
1 Complete the equations under each of the following.
Match the equal areas.

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]

[ ] × [ ] = [ ]
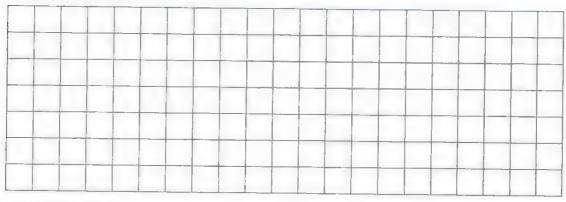
2 Use commutative property to draw two different rectangles of the following dimensions. Multiply to find the area.

a. 2 units , 3 units.
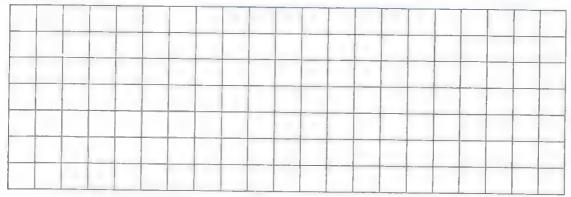
b. 3 units , 4 units.
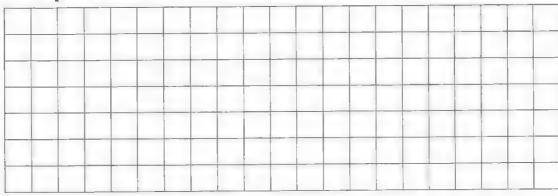
c. 4 units , 5 units.
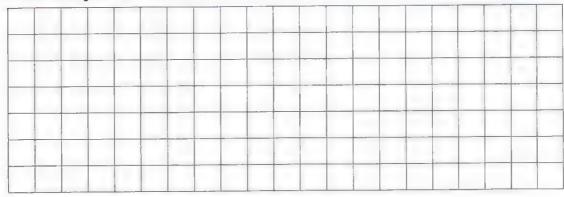
3 Draw on the grids rectangles with different dimensions with an area of each of the following. Write the multiplication equations for each rectangle.

a. 12 square units.

b. 📖 18 square units.

c. 24 square units.

4 📖 Omar planted two flower plots. One was 3 × 4 and one was 2 × 6.
Do they have the same area ? How do you know ?
Show your thinking in numbers and pictures in the grid below.

5 Amira wanted to plant 24 flowers. If one flower needs 1 square unit.
Show two ways for the area of 24 square units.
Write the two commutative property sentences for each.

Third : Exercises on area using models

1 📖 Determine the total area of each shape.

a.

Area = ———————— × ————————
        rows   columns

    = _____ square units

b.

Area = ———————— × ————————
        rows   columns
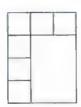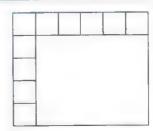
    = _____ square units

c.
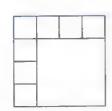
Area = ———————— × ————————
        rows   columns

    = _____ square units

d.

Area = ———————— × ————————
        rows   columns

    = _____ square units

e.

Area = ———————— × ————————
        rows   columns

    = _____ square units

f.

Area = ———————— × ————————
        rows   columns
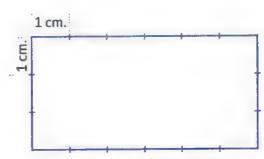
    = _____ square units

Challenge 🎯

2 Use your ruler to measure the width and the length of the rectangle. Calculate the area of the rectangle.

1 cm.

1 cm.

Place a smiley face

- **Areas by splitting arrays**
- **Distributive property on multiplication**
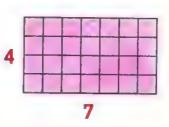
Learn Distributive property

○ Distributive property tells us we can divide (split) a multiplication problem into two or more smaller problems, add together their products, and get the final answer.

○ To find how many squares in big arrays as the following array :

Multiply the number of rows by the number in each row.

4 rows of 7

$$\underset{\text{rows}}{4} \times \underset{\substack{\text{in each}\\\text{row}}}{7} = \underset{\text{Total}}{28}$$

4

7
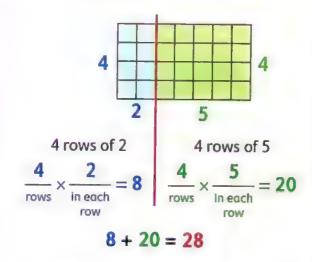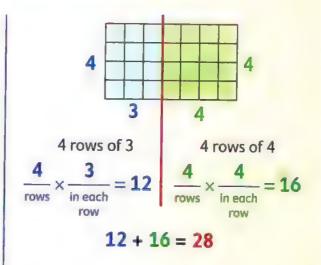
Another way using distributive property :

Split an array into two smaller arrays and add the products of the two arrays.
(There are more than one correct way to break apart an array).

4   **4**

2   **5**

4 rows of 2   4 rows of 5

$$\underset{\text{rows}}{4} \times \underset{\substack{\text{in each}\\\text{row}}}{2} = 8 \quad \underset{\text{rows}}{4} \times \underset{\substack{\text{in each}\\\text{row}}}{5} = 20$$

$$8 + 20 = 28$$

4   **4**

3   **4**

4 rows of 3   4 rows of 4

$$\underset{\text{rows}}{4} \times \underset{\substack{\text{in each}\\\text{row}}}{3} = 12 \quad \underset{\text{rows}}{4} \times \underset{\substack{\text{in each}\\\text{row}}}{4} = 16$$

$$12 + 16 = 28$$

From above :

$$4 \times 7 = (4 \times 2) + (4 \times 5)$$

$$4 \times 7 = (4 \times 3) + (4 \times 4)$$

Notes for parents
• Remind your child the commutative property which says that : $4 \times 7 = 7 \times 4 = 28$.

175
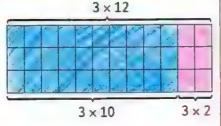
Example ①

Find the product of 3 × 12 in 3 ways using distributive property.
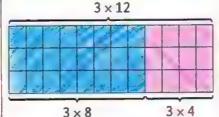
Solution ✓
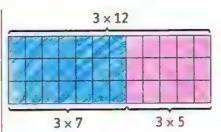
$3 \times 12 = 3 \times 10 + 3 \times 2$

$\quad = 30 + 6$

$\quad = 36$

$3 \times 12 = 3 \times 8 + 3 \times 4$

$\quad = 24 + 12$

$\quad = 36$

$3 \times 12 = 3 \times 7 + 3 \times 5$

$\quad = 21 + 15$

$\quad = 36$

Example ②

Use the distributive property to complete the following.

a. $5 \times 8 = (5 \times 6) + (5 \times \underline{\quad})$

b. $3 \times \underline{\quad} = (3 \times 5) + (3 \times 2)$

Solution ✓
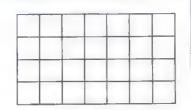
a. $5 \times 8 = (5 \times 6) + (5 \times 2)$ [Hint : 8 = 6 + 2]

b. $3 \times 7 = (3 \times 5) + (3 \times 2)$ [Hint : 5 + 2 = 7]

Check 🔍

1. Find another way to split the same array.
   Write the two equations of the two smaller arrays.

   _____

   _____

2. Complete the following.

   a. $6 \times 8 = (6 \times 3) + (6 \times \underline{\quad})$

   b. $2 \times 9 = (\underline{\quad} \times 5) + (2 \times \underline{\quad})$

   c. $(3 \times 5) + (3 \times 6) = 3 \times \underline{\quad}$

   d. $4 \times 7 = (4 \times \underline{\quad}) + (4 \times 6)$

Notes for parents

• Help your child write different equations of 3 × 12 using the distributive property of multiplication.
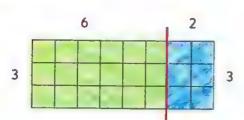
- **Areas by splitting arrays**
- **Distributive property on multiplication**
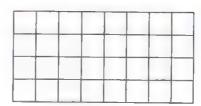
From the school book

1 Split the following arrays into two smaller arrays and label the factors for each part as the example.
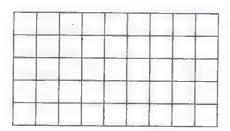
Example :
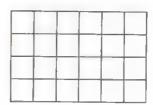
a. 📖
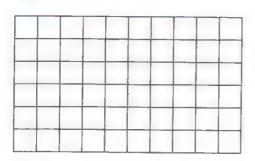
b.
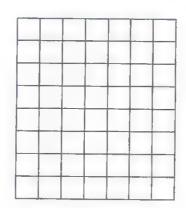
c. 📖

d. 📖
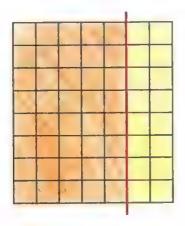
e.
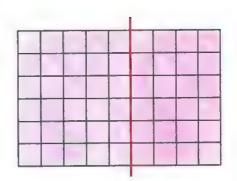
2 Write the distributive property equation of each.

a.

$8 \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$

b.

$\boxed{} \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$

c.

$\boxed{} \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$

d.

$\boxed{} \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$

e.

$\boxed{} \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$

f.

$\boxed{} \times \boxed{} = (\boxed{} \times \boxed{}) + (\boxed{} \times \boxed{})$
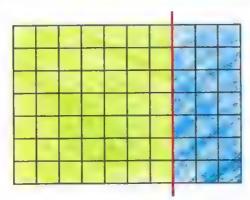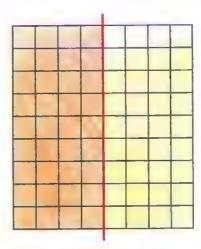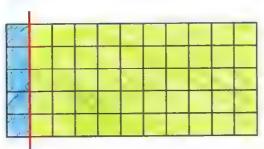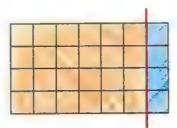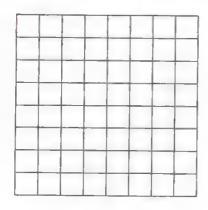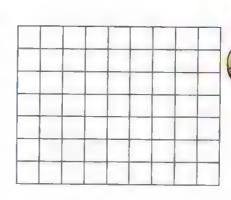
3 Split the following arrays according to
the distributive property equations.

a.
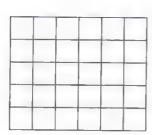
$8 \times 8 = (8 \times 5) + (8 \times 3)$

b.
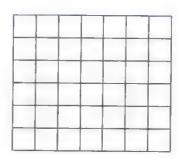
$7 \times 9 = (7 \times 2) + (7 \times 7)$

c.
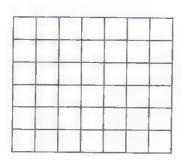
$5 \times 6 = (5 \times 4) + (5 \times 2)$

d.
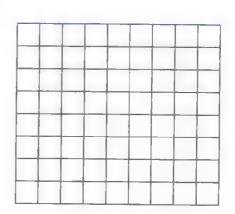
$6 \times 7 = (6 \times 1) + (6 \times 6)$

e.

$6 \times 7 = (6 \times 3) + (6 \times 4)$

f.
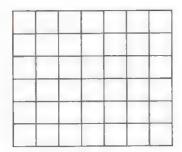
$8 \times 9 = (8 \times 4) + (8 \times 5)$

4 Split the arrays, using the distributive property write the equations.

a.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$6 \times 7 = \bigcirc$

$6 \times 7 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

b.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$5 \times 10 = \bigcirc$

$5 \times 10 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

c.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$3 \times 13 = \bigcirc$

$3 \times 13 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

d.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$7 \times 9 = \bigcirc$

$7 \times 9 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$
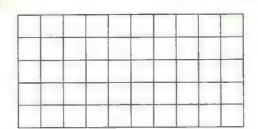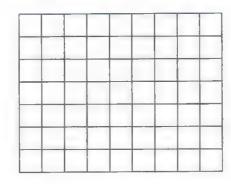
e.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$8 \times 2 = \bigcirc$

$8 \times 2 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

f.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$9 \times 6 = \bigcirc$

$9 \times 6 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

g.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$

$7 \times 8 = \bigcirc$

$7 \times 8 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

h.

$\square \times \square = \square$

$\square \times \square = \square$

$\square + \square = \bigcirc$
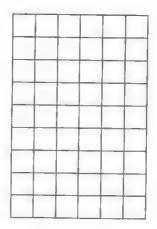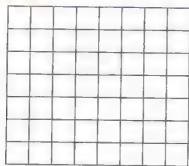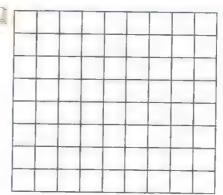
$8 \times 9 = \bigcirc$

$8 \times 9 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

5 Use the distributive property to complete the following equations.

a. $3 \times 9 = (3 \times 6) + (3 \times \underline{\hspace{1cm}})$

b. $4 \times 7 = (4 \times 2) + (4 \times \underline{\hspace{1cm}})$

c. $6 \times 6 = (6 \times 5) + (6 \times \underline{\hspace{1cm}})$

d. $9 \times 13 = (9 \times 7) + (9 \times \underline{\hspace{1cm}})$

e. $9 \times 9 = (9 \times 4) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

f. $4 \times 8 = (4 \times 4) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

g. $5 \times 15 = (5 \times 5) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

h. $7 \times \underline{\hspace{1cm}} = (7 \times 6) + (7 \times 4)$

i. $8 \times 12 = (\underline{\hspace{1cm}} \times 2) + (8 \times \underline{\hspace{1cm}})$

j. $3 \times 11 = (\underline{\hspace{1cm}} \times 10) + (3 \times \underline{\hspace{1cm}})$

k. $7 \times 9 = (\underline{\hspace{1cm}} \times 4) + (7 \times \underline{\hspace{1cm}})$

l. $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = (5 \times 6) + (5 \times 1)$

---

6 Use the distributive property to complete the following equations and find the total.

a. $6 \times 7 = (6 \times 2) + (6 \times \underline{\hspace{1cm}})$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

b. $9 \times 8 = (9 \times 4) + (9 \times \underline{\hspace{1cm}})$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

c. $4 \times 9 = (4 \times \underline{\hspace{1cm}}) + (\underline{\hspace{1cm}} \times 5)$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

d. $12 \times 2 = (\underline{\hspace{1cm}} \times 1) + (\underline{\hspace{1cm}} \times 12)$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

e. $10 \times 11 = (\underline{\hspace{1cm}} \times 10) + (\underline{\hspace{1cm}} \times 1)$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

f. $5 \times 7 = (\underline{\hspace{1cm}} \times 6) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

g. $9 \times 6 = (\underline{\hspace{1cm}} \times 3) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

h. $3 \times 14 = (\underline{\hspace{1cm}} \times 4) + (\underline{\hspace{1cm}} \times \underline{\hspace{1cm}})$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

7 Match.

a. 3×10 $(4 \times 5) + (4 \times 4)$

b. 7×6 $(3 \times 7) + (3 \times 3)$

c. 4×9 $(7 \times 5) + (7 \times 1)$

d. 9×13 $(6 \times 6) + (6 \times 5)$

e. 6×11 $(9 \times 10) + (9 \times 3)$

8 Choose the correct answer.

a. $5 \times 11 = (5 \times 10) + (5 \times \underline{\hspace{1cm}})$ (1 or 5 or 10 or 11)

b. $7 \times \underline{\hspace{1cm}} = (7 \times 10) + (7 \times 3)$ (7 or 10 or 13 or 30)

c. $(4 \times 9) + (4 \times 6) = \underline{\hspace{1cm}} \times 15$ (4 or 6 or 9 or 15)

d. $6 \times 13 = (6 \times \underline{\hspace{1cm}}) + (6 \times 3)$ (3 or 6 or 10 or 13)

e. $4 \times 10 = (4 \times \triangle) + (4 \times \bigcirc)$, then $\triangle + \bigcirc = \underline{\hspace{1cm}}$ (4 or 6 or 8 or 10)

Place a smiley face

183
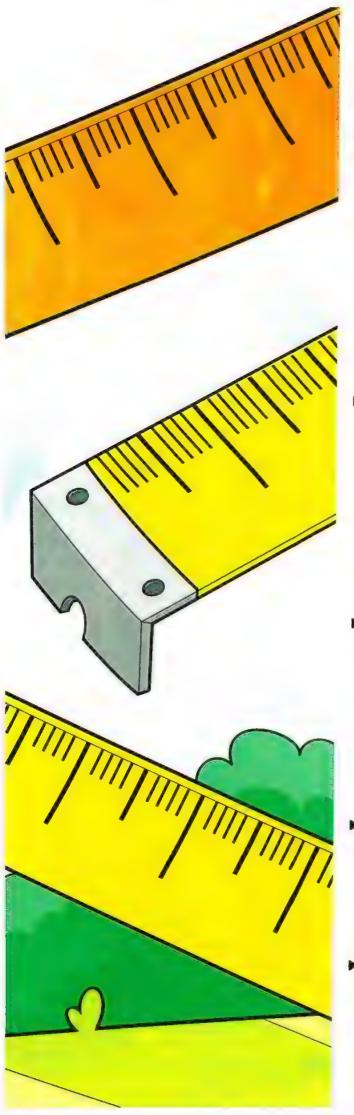
Outcomes of chapter five :

At the end of chapter five, your child will be able to:

▶ **Lessons 1 & 2 :**
- **Perimeter of polygons**
- **Perimeter and area**
- Measure the lengths of sides of polygons in centimeters.
- Define perimeter.
- Calculate the perimeters of polygons in centimeters.
- Explain why perimeter is a linear measurement.
- Explain the difference between perimeter and area.
- Calculate the perimeter and area of given arrays with some units missing.

▶ **Lessons 3 & 4 :**
- **Area using dimensions**
- **Area using different strategies**
- Explain why area is not a linear measurement.
- Calculate the area of a rectangle given only the length and width.
- Describe the problem-solving strategies they used to solve area problems.
- Apply a variety of strategies to solve area problems.
- Explain the strategies they used to solve area problems.

▶ **Lessons 5 & 6 :**
- **Different perimeters for the same area**
- **Different areas for the same perimeter**
- Construct different rectangles with the same area.
- Compare the perimeters of rectangles with the same area but different dimensions.
- Construct different rectangles with the same perimeter.
- Compare the areas of rectangles with the same perimeter but different dimensions.

▶ **Lesson 7 :**
- **Applications on perimeter and area**
- Apply strategies to solve real-world area and perimeter problems.
- Apply his/her understanding of area and perimeter to write story problems.

▶ **Lesson 8 :**
- **Multiplying by multiples of 10**
- Multiply by 10 and multiples of 10.
- Identify and explain patterns observed when multiplying by 10s.

• **Perimeter of polygons**

• **Perimeter and area**

Learn 1 **Perimeter of a polygon**

○ The perimeter is the distance around a figure or a polygon.

○ **First :**

You can find the perimeter by counting the units along the outside of the figure.

The perimeter of the opposite figure = 16 cm

○ **Second :**
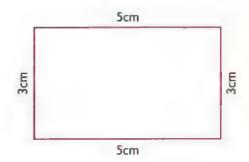
You can find the perimeter by adding all the side lengths of the polygon.

The perimeter of the opposite figure
= $5 + 3 + 5 + 3 = 16$ cm
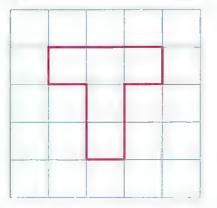
Start →	1 cm	2	3	4	5	
16					6
15					7
14					8
13	12	11	10	9

5cm — 3cm — 5cm — 3cm
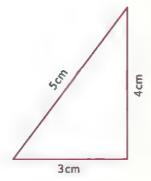
Example ①

Find the perimeter of each figure.

a.

Perimeter = _____ units.

b.

5 cm   4 cm   3 cm

Perimeter = _____ + _____ + _____ = _____ cm

Solution ✓

a.
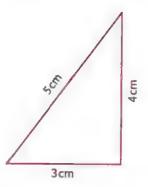
Perimeter = **12** units.
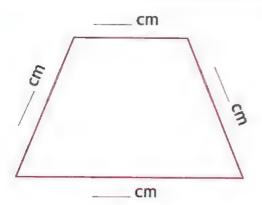
b.

Perimeter = **3** + **4** + **5** = **12** cm

Example ②

Measure each side. Add to find the perimeter.

_____ cm

_____ cm

_____ cm

_____ cm

Perimeter = _____ + _____ + _____ + _____ = _____ cm
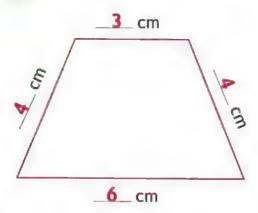
> **Math tip**
>
> Measuring length in one direction as length, width, distance between the endpoints of a side in a polygon is called linear measurement.

Solution ✓

3 cm

4 cm

4 cm

6 cm

Perimeter = **3** + **4** + **4** + **6** = **17** cm

• Let your child use a centimeter ruler to measure the perimeter of a book.

Learn 2 Perimeter and area
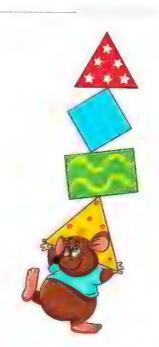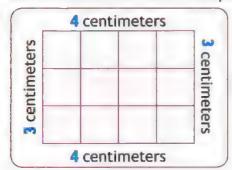
What is the perimeter and the area of this shape ?

○ **The difference between the perimeter and the area :**

* Perimeter : Measurement of the distance around the shape.

* Area : Measurement of the space inside the shape.

4 centimeters

3 centimeters

3 centimeters

4 centimeters
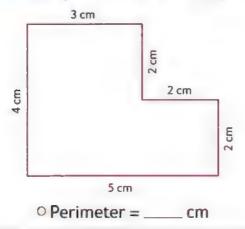
Perimeter = 4 + 3 + 4 + 3
= 14 centimeters.

4 centimeters

1	2	3	4
5	6	7	8
9	10	11	12

3 centimeters

3 centimeters

4 centimeters

Area = 12 square centimeters.

Check
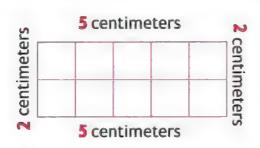
1. Find the perimeter of each figure.
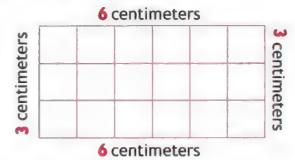
3 cm

2 cm

2 cm

4 cm

2 cm

5 cm

2 cm

1 cm

2

cm

cm

cm

○ Perimeter = ____ cm

○ Perimeter = ____ cm

2. Find the perimeter and the area of each of the following figures.

5 centimeters

2 centimeters

2 centimeters

5 centimeters

6 centimeters

3 centimeters

3 centimeters

6 centimeters

○ Perimeter = ____ + ____ + ____ +
____ = ____ cm

○ Area = ____ square centimeters.

○ Perimeter = ____ + ____ + ____ +
____ = ____ cm

○ Area = ____ square centimeters.

Notes for parents
• Help your child use a ruler to measure the side length.
• Let your child color or cross off as he/she counts to avoid counting twice or skipping units.
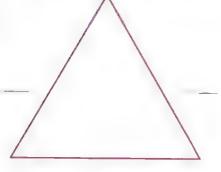
- **Perimeter of polygons**
- **Perimeter and area**

1 Measure each side and find the perimeter of each polygon.
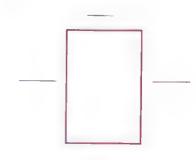
then , ① Color the polygon with the greatest perimeter in red.

② Color the polygon with the smallest perimeter in green.

③ Color the polygon with the same perimeter in blue.

a.

Perimeter = _____ + _____ + _____

= _____ cm

b.

Perimeter = _____ + _____ + _____ + _____

= _____ cm

c.

Perimeter = _____ + _____ + _____ + _____

= _____ cm

d.

Perimeter = _____ + _____ + _____ + _____

= _____ cm

e.

Perimeter = _____ + _____ + _____

= _____ cm

f.

Perimeter = _____ + _____ + _____ + _____

= _____ cm

g.

_____ cm

_____ cm _____ cm

_____ cm

Perimeter = _____ + _____ + _____ + _____

= _____ cm

h.

_____ cm

cm _____ cm cm

cm cm

_____ cm _____ cm

Perimeter = _____ + _____ + _____ + _____

+ _____ + _____ + _____ + _____ = _____ cm

i.

Perimeter = _____ + _____ + _____ + _____

= _____ cm

j.

Perimeter = _____ + _____ + _____ + _____

+ _____ + _____ = _____ cm

2 Find the perimeter and the area of each of the following figures.

a.

7 cm

3 cm   3 cm

7 cm

Perimeter = _____ cm

Area = _____ square centimeters

b.

6 cm

1 cm   1 cm

6 cm

Perimeter = _____ cm

Area = _____ square centimeters

c.

2 cm

4 cm   4 cm

2 cm

Perimeter = _____ cm

Area = _____ square centimeters

d.

3 cm

3 cm   3 cm

3 cm

Perimeter = _____ cm

Area = _____ square centimeters

e.

1 cm

Perimeter = _____ cm

Area = _____ square centimeters

f.

1 cm

Perimeter = _____ cm

Area = _____ square centimeters

g.

1 cm

Perimeter = _____ cm

Area = _____ square centimeters

h.

1 cm

Perimeter = _____ cm
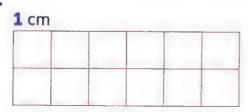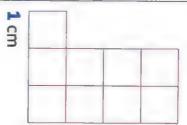
Area = _____ square centimeters

3 📖 **Solve the perimeter and area problems below.**

a. Goat Pen

4 meters

3 meters | 3 meters

4 meters

Perimeter = _____ meters

Area = _____ square meters

b. Chicken Pen

5 meters

3 meters | 3 meters

5 meters

Perimeter = _____ meters

Area = _____ square meters

c. A New Goat Pen

7 meters

4 meters | 4 meters

7 meters

Perimeter = _____ meters

Area = _____ square meters

d. Cattle Pen

9 meters

3 meters | 3 meters

9 meters

Perimeter = _____ meters

Area = _____ square meters

e. Sheep Pen

10 meters

3 meters | 3 meters

10 meters

Perimeter = _____ meters

Area = _____ square meters

f. Duck Pen

5 meters

4 meters

5 meters

Perimeter = _____ meters

Area = _____ square meters

Answer :

g. How much fencing would you need to make ALL of these pens ? _____

h. How many square meters of space would the animals have
   if you combined ALL of the pens ? _____

4 Look at the picture. Then answer.

Consider the side length of the small square on the grid is **1 meter**.

a. What is the area of the backyard?
   _____ square meters

b. What is the perimeter of the house?
   _____ meters
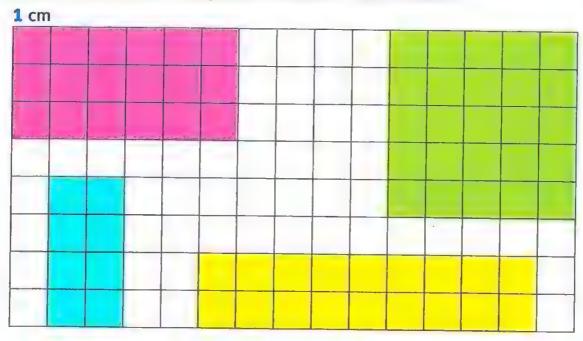
c. Are the area of warehouse and the area of garden equal? Show your work.

   _____

   _____

   _____

d. Are the perimeter of parking and the perimeter of swimming pool equal? Show your work.

   _____

   _____

   _____

1 m

Backyard

Swimming pool

House

Warehouse

Garden

Parking

5 Look at the picture. Complete the table. Then answer.

1 cm
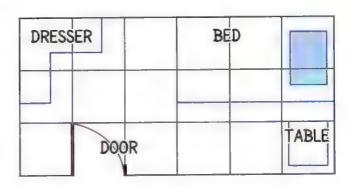
Region	Perimeter in centimeters	Area in square centimeters
Red	_____	_____
Green	_____	_____
Blue	_____	_____
Yellow	_____	_____

a. What is the color of the greatest region in area ? _____

b. Arrange the perimeters of regions in an ascending order.

Order is _____ , _____ , _____ , _____

Challenge

6 Laila wants to put a new desk in her room. She drew a picture of her room to help figure out where it will fit

DRESSER		BED	
	DOOR		TABLE

Does Laila have space for her new desk ? _____
Color where could she put it.

DESK

Place a smiley face

- **Area using dimensions**
- **Area using different strategies**

Learn 1 Area of rectangle given its dimensions
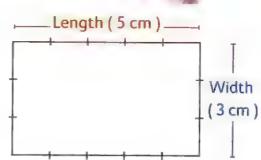
> Instead of counting square units, you can use a formula to find the area of rectangle.

For example :
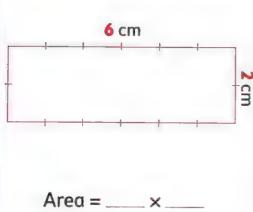
The dimensions of the rectangle are

5 cm (Length) and 3 cm (Width)

Area = Length × Width ⟶ Formula of area of a rectangle

= 5 × 3

= 15 square centimeters

Length (5 cm)

Width (3 cm)
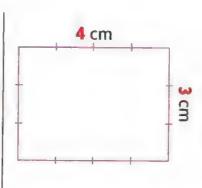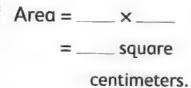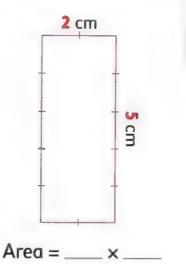
Check

Find the area of each figure.

6 cm

2 cm

Area = ____ × ____

= ____ square

centimeters.

4 cm

3 cm

Area = ____ × ____

= ____ square

centimeters.

2 cm

5 cm

Area = ____ × ____

= ____ square

centimeters.

Learn 2 Calculating the area using different strategies

○ **Ahmed** wants to put artificial grass in his garden.
The garden is a rectangle
5 meters long and **3** meters wide.
How many square meters of artificial grass does Ahmed need ?

○ To find how many square meters of artificial grass, find area of the floor.

○ There are different strategies to find the area of the rectangle.

Strategy ❶

5 columns

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

3 rows
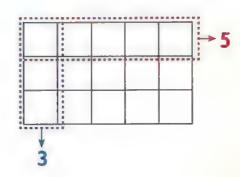
Count all of the squares in the array.
Area = **15** square meters

Strategy ❷

→ 5

↓ 3

Add
$5 + 5 + 5 = 15$ or $3 + 3 + 3 + 3 + 3 = 15$
Area = **15** square meters

Strategy ❸

3 ← → 3
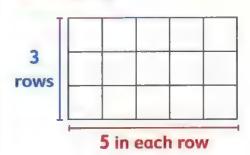
2   3

Split the array into two smaller arrays.
Solve both and add the sums.
Area = $3 \times 5 = (3 \times 2) + (3 \times 3)$
$= 6 + 9 = $ **15** square meters

Strategy ❹

3 rows

5 in each row

Multiply units "Formula of area of a rectangle".
Area = $3 \times 5 = $ **15** square meters
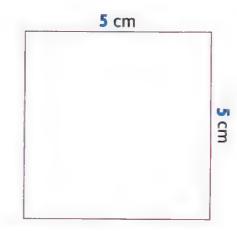
Notes for parents
• Help your child find the area of his/her room.

- **Area using dimensions**
- **Area using different strategies**

From the school book

1 **Find the area of each figure.**
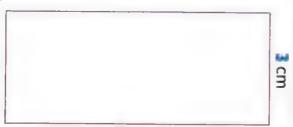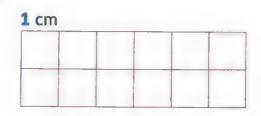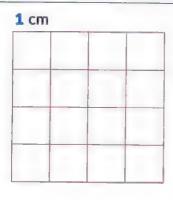
a.

3 cm

4 cm

Area = _____ × _____

= _____ square centimeters.

b.

5 cm

5 cm

Area = _____ × _____

= _____ square centimeters.

c.

7 cm

3 cm

Area = _____ × _____

= _____ square centimeters.

d.

1 cm

Area = _____ × _____

= _____ square centimeters.

e.

1 cm

Area = _____ × _____

= _____ square centimeters.

f.

1 cm

Area = _____ × _____
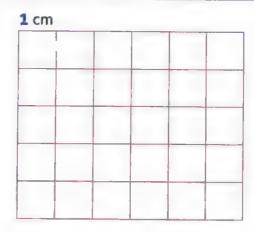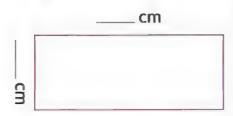
= _____ square centimeters.

2 Use a centimeter ruler to measure the side lengths. Then find the area of each figure.

a.

_____ cm

Area = _____ × _____

= _____ square centimeters.

b.

_____ cm

cm

Area = _____ × _____

= _____ square centimeters.

c.

_____ cm

cm

Area = _____ × _____

= _____ square centimeters.
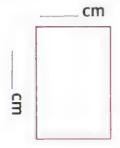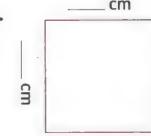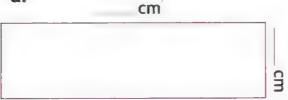
3 Find the area of each figure. Then color the figure with the greatest area in red.

a.

_____ cm

cm

Area = _____ × _____

= _____ square centimeters.

b.

cm

_____ cm

Area = _____ × _____

= _____ square centimeters.

c.

_____ cm

cm

Area = _____ × _____

= _____ square centimeters.

d.

_____ cm

cm

Area = _____ × _____

= _____ square centimeters.

4 Find the space areas in the parking. Then write the name of each main transport below its suitable space.
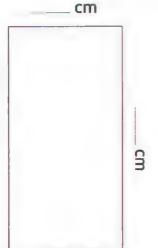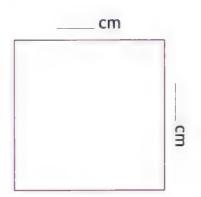
○ **Car** > 18 square meters.

○ **Motorcycle** < 8 square meters.

○ **Lorry** < 30 square meters.
  but > 26 square meters.

○ **Bus** > 20 square meters.

8 m

3 m

5 m

4 m

Area = _____

Name : _____

Area = _____

Name : _____

Parking

4 m

2 m

7 m

4 m

Area = _____

Name : _____

Area = _____

Name : _____

5 Find the area of each figure in two ways.

a. 📖

Way ❶

_____

_____

_____

Area = _____ square
units.

Way ❷

_____

_____

_____

Area = _____ square
units.

b.

Way ❶

_____

_____

_____

Area = _____ square
centimeters.

Way ❷

_____

_____

_____

Area = _____ square
centimeters.

1 cm

c. 📖

Way ❶

_____

_____

_____

Area = _____ square
units.

Way ❷

_____

_____

_____

Area = _____ square
units.

3 units

6 units

d.

Way ❶

_____

_____

_____

Area = _____ square
centimeters.

Way ❷

_____

_____

_____

Area = _____ square
centimeters.

5 cm

4 cm

e.

Way ❶

_____
_____
_____

Area = _____ square centimeters.

Way ❷

_____
_____
_____

Area = _____ square centimeters.

Challenge 🎯
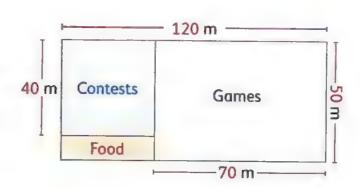
6 The opposite figure shows how a school field was sectioned off for the end-of-year picnic.
What is the area of food section in square meters ? _____

120 m

40 m | Contests | Games | 50 m

Food

70 m

Place a smiley face

- **Different perimeters for the same area**
- **Different areas for the same perimeter**

Learn 1 Different perimeters for the same area

○ Amgad wants to plant a rectangular flower garden in his backyard.

The area of the garden has to be **12** square meters, and he wants to use the least amount of fencing possible.

How long should he make each side so that the perimeter of the garden is as small as possible ?

○ **Using the grid below** (consider each square side on the grid = **1** meter), draw possible rectangles that have an area of **12** square units , then find the perimeter of each rectangle.

Perimeter = 1 + 12 + 1 + 12
= 26 length units

Perimeter = 2 + 6 + 2 + 6
= 16 length units

Perimeter = 3 + 4 + 3 + 4
= 14 length units
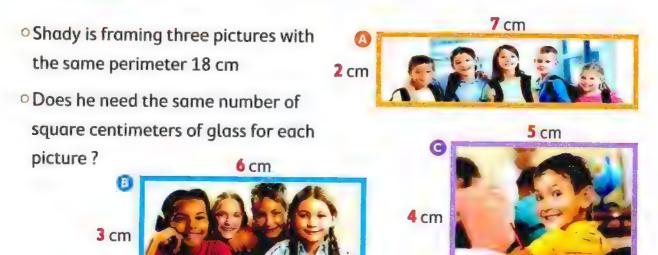
○ **Order the perimeters :** 26 > 16 > 14
14 meters is the smallest perimeter.

When you make different rectangles with the same area , the perimeter does not stay the same.

○ So, to have a garden with the smallest perimeter possible Amgad should make a rectangle with sides 3 m, 4 m long.

Notes for parents
• Train your child to calculate the perimeters of the figures above.
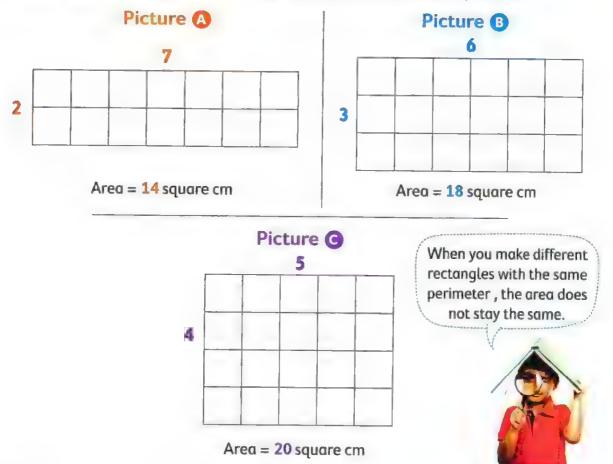
Learn **2** Different areas for the same perimeter

○ Shady is framing three pictures with the same perimeter 18 cm

○ Does he need the same number of square centimeters of glass for each picture ?

A
7 cm
2 cm

B
6 cm
3 cm

C
5 cm
4 cm

○ **To find** how much glass he needs , find the area of each picture.

Picture **A**

7

2

Area = **14** square cm

Picture **B**

6

3

Area = **18** square cm

Picture **C**

5

4

Area = **20** square cm

When you make different rectangles with the same perimeter , the area does not stay the same.
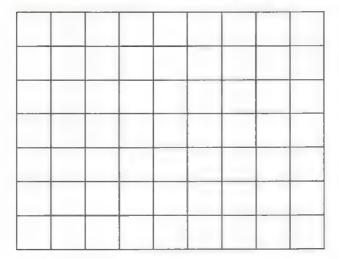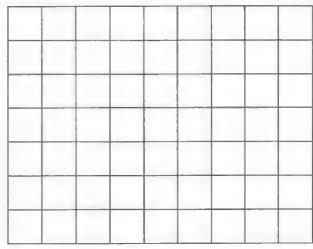
○ **So,** Shady needs different number of square centimeters of glass.

1. **Using the grid below , draw two different rectangles have an area of 16 square units. Then find the perimeter of each rectangle.**
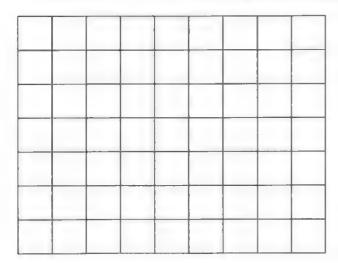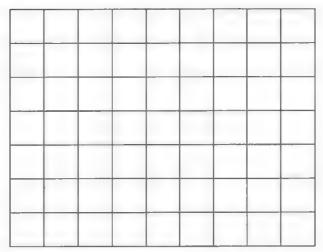
Perimeter = _____   Perimeter = _____

2. **Using the grid below , draw two different rectangles have a perimeter of 16 units. Then find the area of each rectangle.**

Area = _____   Area = _____

• Help your child draw two rectangles with the same area and the same perimeter.
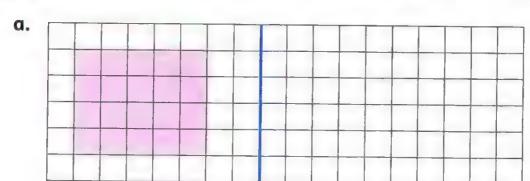
- **Different perimeters for the same area**
- **Different areas for the same perimeter**

From the school book

1 Find the area and the perimeter of the drawn rectangle. Then draw another rectangle with the same area but a different perimeter in each grid and calculate it.
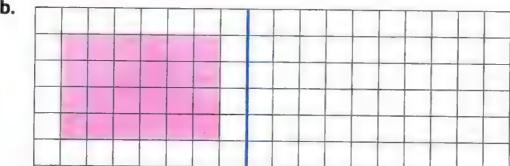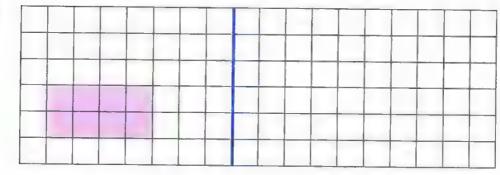
a.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____

b.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____

c.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____
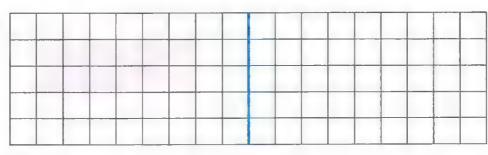
2 Find the area and the perimeter of the drawn rectangle. Then draw another rectangle with the same perimeter but a different area in each grid and calculate it.
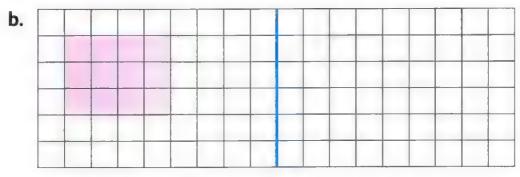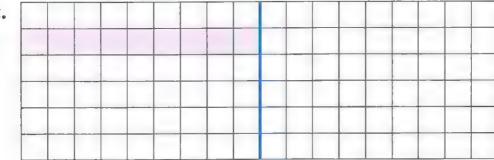
a.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____

b.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____

c.

Area = _____   Area = _____

Perimeter = _____   Perimeter = _____

3 📖 Use your geometric tools to draw two different rectangles with an area of 6 square centimeters. Then find the perimeter of each one and compare the two perimeters.

Side lengths are _____ , _____

Perimeter = _____ centimeters.

Side lengths are _____ , _____

Perimeter = _____ centimeters.

4 📖 Use your geometric tools to draw different rectangles with a perimeter of 20 centimeters. Then find the area of each one and compare the two areas.

Side lengths are _____ , _____
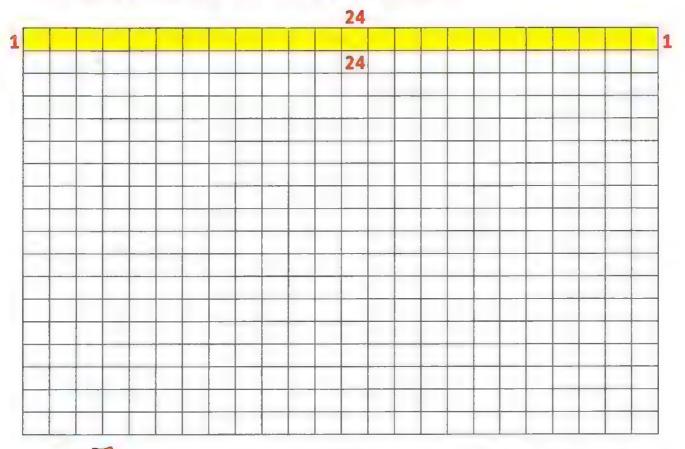
Area = _____ square cm

Side lengths are _____ , _____

Area = _____ square cm

5 Draw **4** different rectangles with an area **24** square units. Then complete the table below. The first one is done for you.

24

1 ░░░░░░░░░░░░░░░░░░░░░░░░ 1

24

	Width (length units)	Length (length units)	Area (square units)	Perimeter (length units)
Rectangle ①	1	24	24	50
Rectangle ②	___	___	___	___
Rectangle ③	___	___	___	___
Rectangle ④	___	___	___	___

Challenge
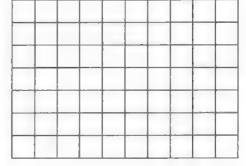
6 Mariam made a frame of a picture with a perimeter of 18 cm and an area of 20 square cm. What are the lengths of the sides ?
«Draw a figure to show your answer»
The side lengths are :
_____ and _____

Place a smiley face

Applications on perimeter and area

Learn

Yara wants to put a lace border around her picture of dimensions 3 cm and 5 cm

How long of lace border does she need ?

- Determine whether you would find perimeter or area.
  Find the perimeter.

- Write a number sentence to solve.

  Perimeter = **5 + 3 + 5 + 3 = 16 cm**

  So, Yara needs **16 cm** of lace border.

> I can use different ways to find the perimeter.

3 cm

5 cm

Wael's family tiled the floor in their front hall of dimensions 6 m and 4 m
They used square tiles that measure 1 m on each side.

How many tiles did they use ?

- Determine whether you would find perimeter or area.
  Find the area.
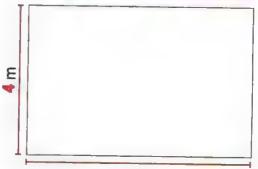
- Write a number sentence to solve.

  Area = **6 × 4 = 24 square meters**

  So, they used **24 square meters** of tiles.

> I can use different ways to find the area.

4 m

6 m

Notes for parents
- Help your child find area and perimeter of carpet in his/her room.

Example ①

Hossam is painting one wall in his bedroom.

The wall measures 7 m long and 3 m wide.

What is the area of the wall ?

Solution ✓

The area of the wall = $7 \times 3 = 21$ square meters

Example ②

A farmer wants to buy fencing to go around his garden.

The garden is 27 m long by 13 m wide.

How much fencing will be need ?

Solution ✓

∗ You would find the perimeter.

The perimeter = $27 + 13 + 27 + 13 = 80$ m

Check 🔍

Solve each of the following.

a. Mona built a backyard pen for her cat.

The length of the pen was 2 meters and the width was 1 meter.

What is the area of the pen ?

_____

_____

b. Yahia wants to make a frame of a picture
with 18 cm length and 12 cm width.

What is the length of the frame ?

_____

_____

• Help your child know the meaning of each story problem and when he / she will calculate the area and perimeter.

Applications on perimeter and area

1 Read and solve each of the following story problems. You can draw a figure for help.

a. Mina built a backyard pen for his puppy.

The length of the pen was 3 meters and the width was 2 meters.

What is the area of the pen ?

_____

_____

b. 📖 Farouk is building a patio out of square tiles.
He wants the length of the patio to be 7 tiles across
and its width to be 6 tiles from the same type.

How many tiles will he use in all to build the patio ?

_____

_____

c. A book had a length of 20 cm and a width of 12 cm

What is the perimeter of the book ?

_____

_____

d. 📖 A farmer is building a fence around his garden.
If the garden is 8 meters long and 3 meters wide.

How much fencing does he need to buy ?

_____

_____

e. 📖 A rug is 3 meters long and 2 meters wide.

What is the area of the rug ?

_____

_____

f. Basma orders a party bannar for his brother's birthday party. The length and width of the bannar are 7 m and 2 m respectively.

What is the area of the party banner ?

_____

_____

g. 📖 Shaimaa is sewing a border on a square baby blanket. The length of the blanket is 45 centimeters and the width is 45 centimeters.

How long will the border by ?

_____

_____

h. Hany is painting one wall in his bedroom. The wall measures 6 m long and 3 m wide.

What is the area of the wall ?

_____

_____

_____

i. A square with side length 6 cm has a greater area than a rectangle with length 9 cm and width 4 cm. **State true or false.**

_____

_____

Challenge 🎯

2 Kareem's school playground is 75 m long and 40 m wide. Ali's school playground is 90 m long and 30 m wide. Kareem and Ali finished a round jogging around their school playgrounds. Who jogged longer ? Explain your answer.

_____

_____

Place a smiley face

Multiplying by multiples of 10

Learn **Multiplying by multiples of 10**

How to find the product of 3 x 40.

It is easy to multiply whole numbers by multiples of 10 using the following strategies.

Notice that
$3 \times 4 = 12$
is a multiplication fact

Remember

▢ = 1

▊ = 10

First strategy

Draw place value blocks which represent 3 groups of 40

3 groups of 40

3×4 **tens** $= 12$**0**

3×4**0** $= 12$**0**

Math tip
You can count by 10s to find the product.

Second strategy

Break apart the multiples of 10 as two factors (the number x 10)

then $\qquad 40 = 4 \times 10$

So, 3×4**0** $= (3 \times 4) \times$ **10**

$\qquad = 12 \times$ **10** $= 12$**0**

Math tip
You can multiply
$3 \times 4 = 12$
and put the zero at the end "120"
× =
$3 \times 40 = 120$

Example

Complete.

a. 2×4 tens = _____ tens = _____

b. $4 \times 70 = ($ _____ $\times$ _____ $) \times 10 = $ _____ $\times$ _____ $=$ _____

c. $3 \times 90 = $ _____

d. $20 + 20 + 20 = $ _____ $\times 20 = $ _____

e. $8 \times $ _____ $= 240$

Solution ✓

a. 2×4 tens = $\underline{8}$ tens = 80

b. $4 \times 70 = (\underline{4} \times \underline{7}) \times 10 = 28 \times 10 = 280$

c. $3 \times 90 = 270$

d. $20 + 20 + 20 = \underline{3} \times 20 = 60$

e. $8 \times \underline{30} = 240$

Check 🔍

Complete.

a. $2 \times 70 = $ _____

b. 5×2 tens = _____

c. $60 + 60 + 60 = $ _____ $\times 60$

d. $80 \times 5 = $ _____

e. $9 \times 50 = $ _____

f. $60 \times $ _____ $= 480$

• Ask your child to use place value blocks and count by 10s to help him/her to find the product.

Multiplying by multiples of 10

From the school book

1 Complete the following as the example. You may use place value blocks to help.

Example :

3×2 tens = $\underline{6}$ tens

3×20 = $\boxed{60}$

Work area

a. 4×3 tens = $\underline{}$ tens

4×30 = $\boxed{}$

b. 2×5 tens = $\underline{}$ tens

2×50 = $\boxed{}$

c. 3×6 tens = $\underline{}$ tens

3×60 = $\boxed{}$

d. 4×7 tens = $\underline{}$ tens

4×70 = $\boxed{}$

e. 6×4 tens = $\underline{}$ tens

6×40 = $\boxed{}$

2 Complete the following. Solve the problems as the example.

Example :

2×40

$= (\underline{2} \times \underline{4}) \times 10 = \underline{8} \times \underline{10} = \underline{80}$

How can you use 2 x 4 to help you find 2 x 40 ?

a. 4×50

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

b. 8×20

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

c. 7×70

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

d. 9×90

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

e. 3×60

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

f. 4×90

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

g. 6×20

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

h. 7×40

$= (\underline{} \times \underline{}) \times 10 = \underline{} \times \underline{} = \underline{}$

3 Solve the following problems using any strategy.

a. $3 \times 50 = \underline{}$

b. $2 \times 60 = \underline{}$

c. $8 \times 40 = \underline{}$

d. $5 \times 20 = \underline{}$

e. $8 \times 20 = \underline{}$

f. $3 \times 70 = \underline{}$

g. $6 \times 90 = \underline{}$

h. $7 \times 40 = \underline{}$

i. $4 \times 40 = \underline{}$

j. $80 \times 9 = \underline{}$

k. $60 \times 3 = \underline{}$

l. $70 \times 8 = \underline{}$

m. $90 \times 2 = \underline{}$

n. $50 \times 5 = \underline{}$

o. $10 \times 10 = \underline{}$

4 Choose the correct answer.

a. 7×3 tens = _____   (73 or 21 or 210 or 730)

b. 5×4 tens = $(5 \times$ _____ $) \times 10$ (5 or 4 or 20 or 200)

c. 3 groups of 50 = _____   (350 or 15 or 1,500 or 150)

d. $70 \times 1 =$ _____ tens.   (7 or 70 or 700 or 701)

e. $90 \times 0 =$ _____   (0 or 9 or 90 or 900)

f. $40 \times 8 =$ _____   (32 or 320 or 408 or 3200)

g. $(3 \times 4) \times 10 = 3 \times$ _____   (14 or 140 or 120 or 40)

h. $4 \times 60 = 3 \times$ _____   (8 or 80 or 60 or 240)

---

5 Complete.

a. $3 \times 2 \times 10 =$ _____   b. $4 \times 5 \times 10 =$ _____

c. $5 \times 9 \times 10 =$ _____   d. $7 \times 8 \times 10 =$ _____

e. $2 \times$ _____ tens = 40   f. $5 \times$ _____ tens = 350

g. $9 \times$ _____ tens = 180   h. $6 \times$ _____ tens = 120

i. $4 \times$ _____ $\times 10 = 120$ j. $2 \times$ _____ $\times 10 = 140$

k. _____ $\times 3 \times 10 = 90$ l. _____ $\times 6 \times 10 = 60$

m. $3 \times$ _____ $= 150$ n. _____ $\times 40 = 80$

o. $7 \times$ _____ $= 210$ p. _____ $\times 50 = 250$

q. $4 \times$ _____ $= 360$ r. _____ $\times 60 = 180$

Challenge 🎯
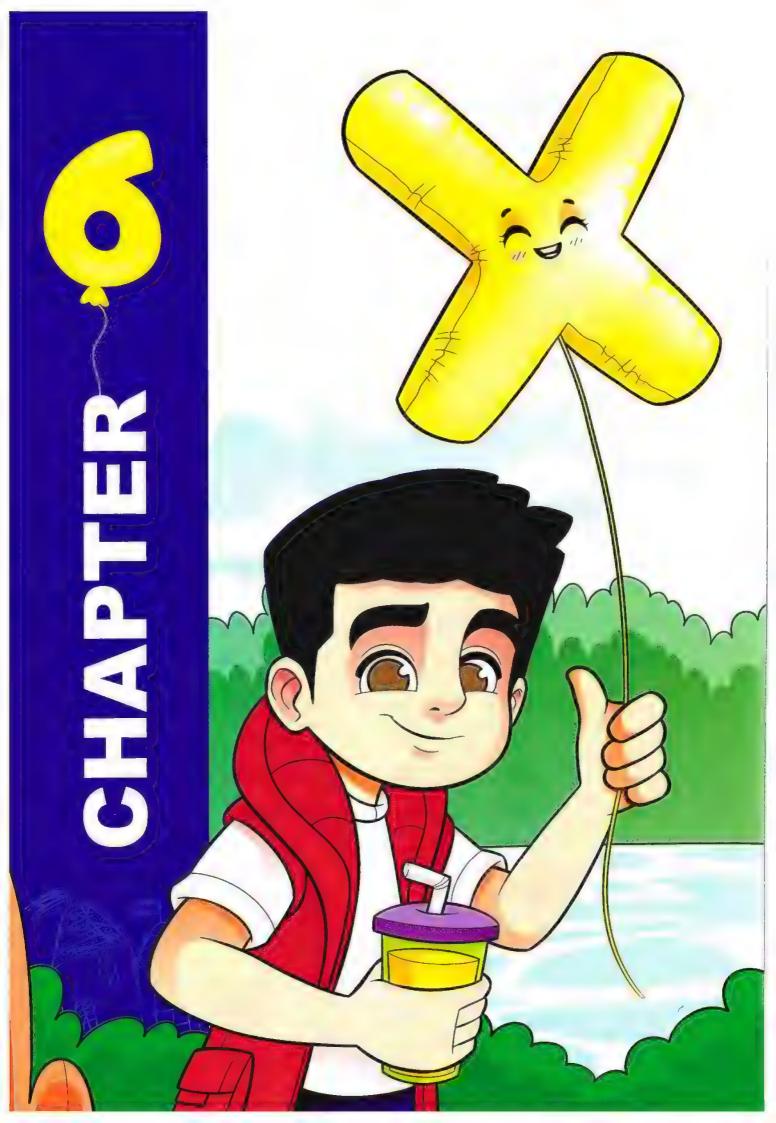
6 Solve the problem : 3×200

_____

_____

Hint

= **100**

Place a smiley face

217

Outcomes of chapter six :

At the end of chapter six, your child will be able to:

▶ **Lesson 1 :**
- **Patterns of multiplying by multiples of 10**
- Explain patterns observed when multiplying by multiples of 10.

▶ **Lesson 2 :**
- **Strategies of multiplying by 9**
- Investigate and apply patterns and strategies when multiplying by 9.
- Teach others one strategy for multiplying by 9.

▶ **Lesson 3 :**
- **Facts on multiplication and addition**
- Identify patterns in multiplication and addition facts.
- Explain how patterns observed in multiplication and addition facts can be helpful when solving problems.
- Apply strategies to solve addition and multiplication facts quickly and accurately.

▶ **Lesson 4 :**
- **Comparing and ordering numbers of different forms**
- Identify and describe patterns in the place value system up to the hundred thousands place.
- Apply strategies for ordering numbers.

▶ **Lesson 5 :**
- **Addition strategies**
- Apply a variety of strategies to solve addition problems.
- Explain the importance of learning different problem-solving strategies.

▶ **Lesson 6 :**
- **Subtraction strategies**
- Explain the relationship between addition and subtraction.
- Apply strategies to subtract two numbers up to four digits.
- Use addition to check answers to subtraction problems.
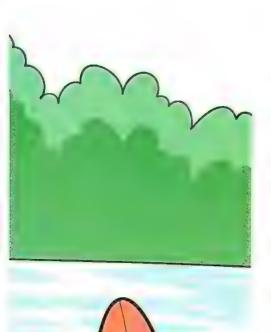
▶ **Lesson 7 :**
- **Applications on addition and subtraction**
- Apply strategies to solve addition and subtraction story problems.
- Reflect on learning to identify areas of strength and opportunities for growth.

▶ **Lessons 8 & 9 :**
- **Capacity**   • **Reading capacity**
- Define volume as the measurement of the capacity of a container.
- Explain the relationship between milliliters and liters.
- Estimate the size of a milliliter of water.
- Identify the best unit to measure the capacity of a given container.
- Read volume measurements on a standard labeled container.
- Write what he/she has learned about capacity.

Patterns of multiplying by multiples of 10

Learn

- **Multiplication facts and place value patterns can help you multiply.**

  For example :

  If you know **2 × 4 = 8**, then you can use mental math to find :

  2×40 , 2×400 and $2 \times 4,000$

  2 × 4 = 8 ← multiplication fact
  2 × 40 = 80
  2 × 400 = 800
  2 × 4,000 = 8,000

  > **Math tip**
  > As the numbers of zeroes in the factor increases, the number of zeroes in the product increases.

Multiplication strategies

How to find 5 × 30

Here are some strategies to use.

> These strategies can be used when multiply by hundreds and thousands.

First strategy

Use the multiplication fact and patterns to help you multiply.

Where ⟶ **5 × 3 = 15**

Then ⟶ **5 × 30 = 150**

Second strategy

Split the multiples of 10 as two factors "30 = 3 × 10"

5 × 30

=(5 × 3) × 10

= 15 × 10 = 150

Third strategy

Draw place value blocks which represent 5 groups of 30

5 × 3 tens = 15 tens

5 × 30 = 150

> **Math tip**
> You can count by 10 s on drawings to find the product.

Notes for parents

- Ask your child to find the product of 5 × 300 using multiplication fact and patterns.
- Make sure that your child recognize the strategies and ask him/her to use them to find the product of 3 × 70

Patterns of multiplying by multiples of 10

From the school book

1 Complete the following.

a.
3 × 10	_____
3 × 100	_____
3 × 1000	_____

b.
2 × 3	_____
2 × 30	_____
2 × 300	_____
2 × 3,000	_____

c.
4 × 6	_____
4 × 60	_____
4 × 600	_____
4 × 6,000	_____

d.
7 × 4	_____
7 × 40	_____
7 × 400	_____
7 × 4,000	_____

e.
5 × 6	_____
5 × 60	_____
5 × 600	_____
5 × 6,000	_____

f.
5 × 7	_____
5 × 70	_____
5 × 700	_____
5 × 7,000	_____

2 Solve the problems below. Split the multiples of 10 into 10 and the other factor. For example, 40 has the factors 10 and 4.

Example : 8 × 40   (8 × 4) × 10 = 320

a. 3 × 90 (____ × ____) × 10 = ____

b. 4 × 80 (____ × ____) × 10 = ____

c. 9 × 20 (____ × ____) × 10 = ____

d. 6 × 30 (____ × ____) × 10 = ____

e. 8 × 50 (____ × ____) × 10 = ____

f. 7 × 30 (____ × ____) × 10 = ____

g. 6 × 70 (____ × ____) × 10 = ____

h. 5 × 40 (____ × ____) × 10 = ____

3 Find the following products.

a. 3 × 40 = _____

b. 2 × 50 = _____

c. 4 × 60 = _____

d. 7 × 30 = _____	**e.** 5 × 50 = _____	**f.** 4 × 80 = _____
g. 6 × 700 = _____	**h.** 9 × 300 = _____	**i.** 5 × 100 = _____
j. 3 × 200 = _____	**k.** 4 × 5,000 = _____	**l.** 6 × 3,000 = _____
m. 2 × 9,000 = _____	**n.** 5 × 8,000 = _____	**o.** 8 × 7,000 = _____

---

4 Match.

a. 4 × 20   **b.** 3 × 60   **c.** 5 × 70   **d.** 8 × 30

240   350   80   180

---

5 Complete.

a. 3 × _____ = 150

b. _____ × 30 = 210

c. _____ × 500 = 4,500

d. _____ × 600 = 1,200

e. _____ × 2,000 = 8,000

f. 9 × _____ = 27,000
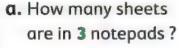
g. 7 × _____ = 1,400

h. 1 × _____ = 4,000

---

6 Answer the following problems.

a. How many sheets are in **3** notepads ?	**b.** How many hats are in **4** bags ?	**c.** How many stickers are in **5** packs ?
NOTEPAD 40 Sheets	60 party hats	30 Stik-on STARS
_____	_____	_____

d. Amir bought 3 books to read.
Each book costs **40** pounds.

How much did Amir pay ?

_____

e. A fruit seller sells every day **60** kilograms of fruit.

How many kilograms does the fruit seller sell in 4 days ?

_____

Challenge

7 Malek bought a box of cards. In the box there were 6 smaller boxes, and in each of those boxes there were 6 packs of 10 cards. To find the total number of cards he bought, Malek wrote this equation : 6 × 60 = 360.
Is he correct ? Explain how you know.

_____

_____

Place a smiley face
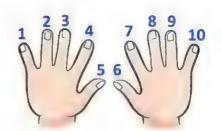
Strategies of multiplying by 9
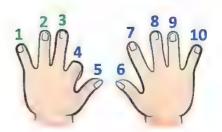
Learn 1 Finger using strategy

○ Put both hands on your desk , palms down. Mentally number your fingers from left to right.

○ To find 4×9, bend down finger number 4 Fingers to the left of the bent finger show the number of tens in the product.

○ Fingers to the right of the bent finger show the number of ones in the product.

$4 \times 9 = 36$

Check
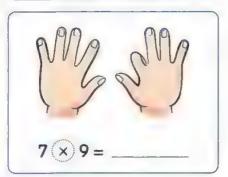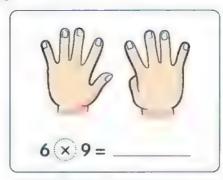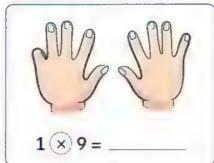
Solve the following by using figures.

$2 \times 9 =$ _____

$6 \times 9 =$ _____

$7 \times 9 =$ _____

$1 \times 9 =$ _____

Notes for parents

• Ask your child to find the product of 5×9 using his/her fingers.

Learn 2 List of equations strategy

○ What's the pattern ?

Bassem and Sarah must find 8×9. They look for patterns enable to help.

9s facts

1	× 9	=	9
2	× 9	=	18
3	× 9	=	27
4	× 9	=	36
5	× 9	=	45
6	× 9	=	54
7	× 9	=	63
8	× 9	=	?
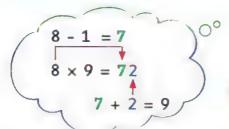
The ones digit goes down by 1 each time.
So the next ones digit is 2.
The tens digit goes up by 1 each time. So the next tens digit is 7.
So, $8 \times 9 = 72$

I see a different pattern. The tens digit is 1 less than the first factor. The digits of the product add up to 9

$8 - 1 = 7$
$8 \times 9 = 72$
$7 + 2 = 9$

○ Notice that :

The sum of the tens and ones digits in each product is 9

$9 \times 2 = 18 , 1 + 8 = 9$	$9 \times 5 = 45 , 4 + 5 = 9$	$9 \times 7 = 63 , 6 + 3 = 9$

Check

Solve the following by using pattern.

$3 \times 9 = \boxed{}$ $9 \times 4 = \boxed{}$ $9 \times 6 = \boxed{}$

$5 \times 9 = \boxed{}$ $7 \times 9 = \boxed{}$ $9 \times 9 = \boxed{}$

• Ask your child to find the product 7×9 using pattern.

Complete coloring skip-count forward by 9s

Notice the diagonal pattern of products of multiplying by 9 :
9, 18 , 27 , 36, 45, 54, 63, 72, 81

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Check 🔍

Complete.

45 , 54 , _____ , 72.   18 , 27 , _____ , _____ .

63 , 72 , _____ , _____ .   9 , _____ , 27 , _____ .

36 , 45 , _____ , _____ .   27 , _____ , _____ , 54.

Learn 4 Ten facts strategy

Find : $4 \times 9 = ?$

First

You can think of the problem as

$$4 \times 10 = 40$$

Second

Subtract one of the 4s

$$\begin{array}{r} 4\,0 \\ -4 \\ \hline 3\,6 \end{array}$$

| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4̶ |

Check

1. To find : $8 \times 9 = ?$ Complete.

$8 \times 10 = $ _____   Then _____ $-\; 8 = $ _____

Then $8 \times 9 = $ _____

2. To find : $5 \times 9 = ?$ Complete.

$5 \times 10 = $ _____   Then _____ $-\; 5 = $ _____
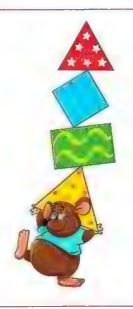
Then $5 \times 9 = $ _____

• Ask your child to find the product of 10 × 10 using ten fact strategy.

Strategies of multiplying by 9

1 Find the product using different strategies.

a. 3 × 9 = _____

c. 6 × 9 = _____

e. 9 × 5 = _____

g. 1 × 9 = _____

i. 9 × 7 = _____

b. 2 × 9 = _____

d. 4 × 9 = _____

f. 9 × 8 = _____

h. 0 × 9 = _____

j. 9 × 10 = _____

2 Join.

a. 7 × 9

b. 72

c. 4 × 9

d. 45

36

9 × 5

63

9 × 8

3 Complete in the same pattern.

a. 72 , 81 , _____ , 99

b. 27 , 36 , _____ , _____

c. 45 , 54 , _____ , _____

d. 9 , 18 , 27 , _____ , _____

e. 36 , 27 , _____ , _____

f. 18 , _____ , _____ , 45

4 Complete.

a. ___ × 9 = 36	**b.** 9 × ___ = 81	**c.** ___ × 9 = 18
d. 9 × ___ = 27	**e.** ___ × 9 = 9	**f.** 9 × ___ = 54
g. ___ × 9 = 72	**h.** 9 × ___ = 63	**i.** ___ × 9 = 0
j. 9 × ___ = 45	**k.** ___ × 9 = 90	**l.** ___ × 9 = 27

5 Find the product.

a. 20 × 9 = ☐	**b.** 9 × 50 = ☐	**c.** 300 × 9 = ☐
d. 9 × 600 = ☐	**e.** 4,000 × 9 = ☐	**f.** 9 × 8,000 = ☐

6 Choose the correct answer.

a. 9 × 4 ☐ 6 × 6   (< or = or >)

b. 9 × 20 ☐ 100 − 80   (< or = or >)

c. 9 × 2 = 3 × ___   (4 or 5 or 6)

d. 9 × 13 = (9 × 10) + (9 × ___)   (2 or 3 or 4)

e. 400 + 50 = 9 × ___   (5 or 50 or 500)

f. 6 × 9 = ___   (45 or 54 or 63)

g. 9 × 0 = 9 − ___   (1 or 0 or 9)

Place a smiley face

229

Facts on multiplication and addition

📝 **Learn**

○ Here are some addition and multiplication facts will help you to solve addition and multiplication problems.

Adding to zero
The sum of zero and any number is that number.
Example : $0 + 3 = 3$

Multiplying by zero
The product of zero and any number is zero.
Example : $0 \times 3 = 0$

Adding to 1
The sum of 1 and any number is the number which just comes after.
Example : $1 + 3 = 4$

Multiplying by 1
The product of 1 and any number is that number.
Example : $1 \times 3 = 3$

Adding in any order
Addends can be added in any order and the sum does not change.
Example : $3 + 2 = 5$
$2 + 3 = 5$

Multiplying in any order
Factors can be multiplied in any order and the product does not change.
Example : $3 \times 2 = 6$
$2 \times 3 = 6$

Doubling numbers
Adding the same number twice is doubling it (multiplying by 2).
Example : $3 + 3 = 2 \times 3$
$6 = 6$

Multiplying big numbers
Break apart big numbers into two smaller numbers.
Example : 6×7
$= (6 \times 5) + (6 \times 2)$
$= 30 + 12$
$= 42$

Notes for parents
• Help your child recognize the facts of addition and multiplication and ask him/her to explain how they similar or different.

Facts on multiplication and addition

1 Match the equal results.

a. 4 + 0 b. 3 × 4 c. 0 + 0 d. 3 + 4 e. 4 + 4

4 × 3   4 + 3   4 × 1   2 × 4   2 × 0

2 Use addition or multiplication facts to find results.

a. 5 × 1 = ☐   b. 6 + 0 = ☐   c. 8 × 9 = ☐

d. 2 × 2 = ☐   e. 3 + 7 = ☐   f. 9 × 0 = ☐

g. 10 + 5 = ☐   h. 6 × 4 = ☐   i. 5 + 6 = ☐

j. 6 + 6 = ☐   k. 2 × 10 = ☐   l. 0 × 0 = ☐

m. 5 + 10 = ☐   n. 1 × 8 = ☐   o. 4 × 10 = ☐

p. 0 + 10 = ☐   q. 4 × 5 = ☐   r. 9 + 2 = ☐

s. 1 × 1 = ☐   t. 7 + 7 = ☐   u. 1 + 6 = ☐

v. 9 × 9 = ☐   w. 10 × 0 = ☐   x. 5 + 5 = ☐

y. 8 + 1 = ☐   z. 1 × 2 = ☐

3 Check the following problems if add or multiply. Find the results.

a. Amgad bought **3** toys. Each toy costs **5** pounds.
How much money did Amgad pay ?

Solve : _____

Check

Add   Multiply

b. Sarah read **4** books in a month. In the next month she read **5** books.
How many books did she read in the two months ?

Solve : _____

Check

Add   Multiply

c. Youssef has **5** sets of coloring pencils. Each set has **6** pencils.
How many pencils does Youssef have in all ?

Solve : _____

Check

Add   Multiply

4 Complete the missing numbers.

a. $3 \times \underline{\hspace{1cm}} = 7 \times 3$

b. $4 \times \underline{\hspace{1cm}} = 0$

c. $6 + \underline{\hspace{1cm}} = 7$

d. $\underline{\hspace{1cm}} \times 5 = 5$

e. $\underline{\hspace{1cm}} + 4 = 5$

f. $9 + 9 = \underline{\hspace{1cm}} \times 2$

g. $\underline{\hspace{1cm}} + 0 = 6$

h. $8 + \underline{\hspace{1cm}} = 7 + 8$

i. $1 + \underline{\hspace{1cm}} = 9$

j. $7 + \underline{\hspace{1cm}} = 7$

k. $7 \times 8 = (7 \times \underline{\hspace{1cm}}) + (7 \times 7)$

l. $8 \times \underline{\hspace{1cm}} = (8 \times 10) + (8 \times 2)$

5 Choose the correct answer.

a. $0 \times 5 = 7 \times$ _____   (5   or   3   or   0)

b. $7 + 0 = 7 \times$ _____   (0   or   1   or   7)

c. $9 \times 5 = (9 \times 3) + (9 \times$ _____)   (8   or   3   or   2)

d. $3 \times 2 = 3 +$ _____   (2   or   3   or   6)

e. $5 + 5 =$ _____ $\times 2$ (5   or   10   or   3)

f. $1 + 5 = 6 \times$ _____   (0   or   1   or   2)

g. $5 \times 2 = 10 +$ _____   (0   or   1   or   2)

h. $3 \times 4 = 0 +$ _____   (3   or   4   or   12)

i. $7 \times 0 = 7 -$ _____   (0   or   7   or   1)

j. $6 + 0 = 3 \times$ _____   (0   or   2   or   6)

k. $1 \times 10 = 1 +$ _____   (10   or   0   or   9)

Challenge

6 Put x or +.

a. 8 ◯ 0 = 8	b. 5 ◯ 1 = 5	c. 8 ◯ 2 = 10
d. 1 ◯ 4 = 5	e. 0 ◯ 10 = 0	f. 2 ◯ 4 = 8

Place a smiley face
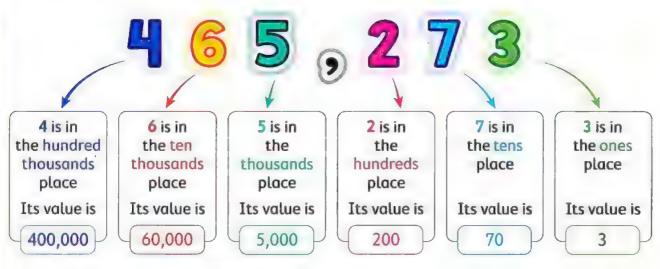
Comparing and ordering numbers of different forms

Remember 1 The value and the place value

○ The value of each digit in any number depends on its place in this number.

Example :

Notice the value and place value of each digit in the number 4 6 5 , 2 7 3

4 6 5 , 2 7 3

4 is in the hundred thousands place	6 is in the ten thousands place	5 is in the thousands place	2 is in the hundreds place	7 is in the tens place	3 is in the ones place
Its value is	Its value is	Its value is	Its value is	Its value is	Its value is
400,000	60,000	5,000	200	70	3

○ **Different forms of writing a number :**

- Standard form : 465,273

- Expanded form : 400,000 + 60,000 + 5,000 + 200 + 70 + 3

- Word form : Four hundred sixty-five thousand, two hundred seventy-three.

Check Complete the table.

Number	Place value of circled digit	Value of circled digit
③5,276	_____	_____
179,⓪65	_____	_____
②,351	_____	_____
42,⑥78	_____	_____
203,4⑨1	_____	_____

Notes for parents

• Help your child review on the value and the place value for 6-digit number.

Remember 2 Comparing and ordering numbers

- ## How do you compare big numbers ?

Compare 471,678 and 89,243

- 471,678 has more digits than 89,243

So, 471,678 is greater than 89,243

Compare 346,257 and 348,940

- 346,257 and 348,940 have the same number of digits, so :

First : Compare the hundred thousands digits	→	**Second :** Compare the ten thousands digits	→	**Third :** Compare the thousands digits
3 4 6 , 2 5 7 3 4 8 , 9 4 0		3 4 6 , 2 5 7 3 4 8 , 9 4 0		3 4 6 , 2 5 7 3 4 8 , 9 4 0
The digits are the same		The digits are the same		6 < 8

So, 346,257 smaller than 348,940   346,257 < 348,940

- ## Ordering numbers

- **Ascending order** is ordering numbers from the smallest to the greatest.

  For example :

  95,631 , 154,376 , 484,688 and 841,550 are arranged in an asending order.

- **Descending order** is ordering numbers from the greatest to the smallest.

  For example :

  703,544 , 614,580 , 609,214 and 351,677 are arranged in a desending order.

Check

1. **Compare, write "> , = or <".**

   a. 99,564 ◯ 213,456   b. 561,374 ◯ 552,987

   c. 800,753 ◯ 708,079   d. 267,314 ◯ 345,678

2. **Arrange the following numbers in an ascending order.**

   | 745,319 | | 953,442 | | 467,890 | | 754,319 |

   The order is : _____ , _____ , _____ , _____

- Ask your child to tell you two numbers and compare between them.
- Help your child arrange big numbers ascendingly and descendingly.

Comparing and ordering numbers of different forms

1 Complete the following.

a. 📖 3,509 = _____ (in expanded form)

b. Three hundred twenty-one thousand , nine hundred thirty-one in standard

form is _____

c. The value of the digit 6 in the number 26,033 is _____ and its place value is _____

d. 📖 6,000 + 50,000 + 40 + 300 + 2 = _____

e. 4,327 = _____ thousands + _____ hundreds + _____ tens

+ _____ ones

f. The place value of the digit 5 in the number 351,260 is _____

g. The place value of the digit 1 in the number 127,536 is _____ and its

value is _____

---

2 Choose the correct answer.

a. The value of the digit 3 in the number 43,782 is _____

○ 30,000   ○ 300,000   ○ 3,000

b. 6,000 + 100,000 + 5 + 20 + 700 = _____

○ 16,725   ○ 106,725   ○ 61,527·

c. The place value of the digit 8 in the number 582,014 is _____

○ Thousands   ○ Ten thousands   ○ Hundred thousands

d. Five hundred thirty-one thousand, seventy-four in standard form is _____

○ 531,740   ○ 53,174   ○ 531,074

e. 74, 215 > _____

○ 74,225   ○ 74,316   ○ 74,005

f. 352,948 < _____

○ 350,949   ○ 352,950   ○ 352,850

g. The place value of the digit 2 in the number 32,615 is _____

○ Hundred thousands   ○ Ten thousands   ○ Thousands

3 Complete the following.

a. 30,000 = _____ thousands

b. 200 hundreds = _____ thousands.

c. 4,000 = _____ thousands

d. _____ tens = 600

e. _____ = 200 thousands

f. 1 hundred thousand = _____ ten thousands

---

4 Put > , < or =.

a. 7 thousands ◯ 700 thousands

b. 79,284 ◯ 79,282

c. 14,120 ◯ 14,210

d. 120,000 ◯ 1,200 hundreds

e. 582,006 ◯ 581,006

f. 401,603 ◯ Forty-one thousand , six hundred three

g. 9,999 ◯ 10 thousands

h. 371,502 ◯ 39,813

i. 35 + 500 + 3,000 ◯ 535 + 3,000

j. 80,000 + 7,000 + 123 ◯ 7,000 + 800,000 + 123

---

5 Arrange the following numbers in an ascending order.

a. 5,021 5,201 5,102 5,210

The order is : _____ , _____ , _____ , _____

b. 55,318 505,720 5,099 550,941 55,418

The order is : _____ , _____ , _____ , _____ , _____

---

6 Arrange the following numbers in a descending order.

a. 3,109 499 30,199 4,099 409,009

The order is : _____ , _____ , _____ , _____ , _____

b. 248,672 15,368 9,725 248,671 15,378

The order is : _____ , _____ , _____ , _____ , _____

7 Find the mistake in each of the following. Correct the mistake.

a. The value of the digit 7 in the number 74,123 is 700,000

b. The expanded form of the number 835,469 is 8 + 30 + 500 + 4,000 + 60,000 + 900,000

c. The word form of the number 58,072 is fifty-eight thousand , seven hundred two.

d. The place value of the digit 5 in the number 561,248 is ten thousands.

e. 300 thousands = 3,000 tens

f. 91,000 + 234 > 91,235

g. 13,470 < 13,407

h. 800 hundreds = 8 thousands

i. The numbers :

5,101 - 10,050 - 510,001 - 501,001 - 50,011 are arranged in an ascending order.

Challenge

8 Complete the missing digits in the two numbers 324,☐65 and 19☐,654 Such that the two missing digits have the same value.

Place a smiley face

Addition strategies

Learn

Add **324 + 167**

Here are some strategies that help you to add.
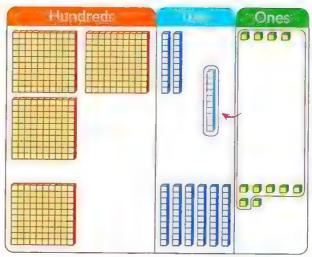
First strategy
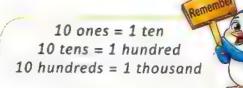
Adding using place value blocks.

- Show each number with place value blocks.
- Combine the ones
  4 ones + 7 ones = 11 ones = 11
- Combine the tens
  2 tens + 6 tens = 8 tens = 80
- Combine the hundreds
  3 hundreds + 1 hundred = 4 hundreds = 400
- Add each value to find the sum.
  400 + 80 + 11 = 491

Hundreds | Tens | Ones

Remember

10 ones = 1 ten
10 tens = 1 hundred
10 hundreds = 1 thousand

Second strategy

Decomposing numbers.

- Decomposing each number writing the values of each digit.
- Add the values of ones , tens and hundreds.
- Add the total values
  400 + 80 + 11 = 491

$$324 \longrightarrow 300 + 20 + 4$$
$$+167 \longrightarrow + 100 + 60 + 7$$
$$\overline{\qquad 400 + 80 + 11}$$

Number line hops.

- Decompose the smeller number which is 167.

- The first hop in the number line is adding hundreds.

- The second hop in the number line is adding tens.

- The third hop in the number line is adding ones.

$167 \longrightarrow 100 + 60 + 7$

$324 + 100 = 424$

$424 + 60 = 484$

$484 + 7 = 491$

$324 + 167$

324   424   484   491

Fourth strategy

Adding with regrouping

- Start by adding the ones moving to the left.

This shows that we regrouped 10 ones as 1 ten

$$
\begin{array}{r}
1 \\
3\,2\,4 \\
+\quad 1\,6\,7 \\
\hline
4\,9\,1
\end{array}
$$

Check

Use one of the previous strategies to show how to find the sum of 416 and 258.

_____

_____

_____

_____

Notes for parents

• Help your child understand all strategies and ask him/her to find the sum of 508 and 192.

Addition strategies

1 Use decomposing numbers strategy to add each of the following.

Problem	Work area	The sum
a. 328 + 461	____ + ____ + ____ ____ + ____ + ____ _____ ____ + ____ + ____	_____
b. 142 + 325	____ + ____ + ____ ____ + ____ + ____ _____ ____ + ____ + ____	_____
c. 615 + 324	____ + ____ + ____ ____ + ____ + ____ _____ ____ + ____ + ____	_____
d. 📖 483 + 201		
e. 📖 823 + 262		
f. 3,125 + 4,519		
g. 7,210 + 2,325		

2 Use the number line to add each of the following.

Problem	Work area	The sum
a. 243 + 532	+ _____ + _____ + _____ 532 _____ _____ _____	_____
b. 257 + 354	+ _____ + _____ + _____ 354 _____ _____ _____	_____
c. 348 + 532	+ _____ + _____ + _____ 532 _____ _____ _____	_____
d. 677 + 233		
e. 865 + 337		
f. 2,013 + 278		
g. 4,156 + 1,243		

3 Add.

a.
```
    437
+   318
_____
```

b.
```
    532
+   218
_____
```

c.
```
    629
+   317
_____
```

d.
```
    757
+   156
_____
```

e.
```
    160
+   485
_____
```

f.
```
    678
+   228
_____
```

g.
```
    145
+    56
_____
```

h.
```
    625
+    91
_____
```

i.
```
  3,236
+ 4,285
_____
```

j.
```
  5,290
+   333
_____
```

k.
```
  6,706
+ 2,186
_____
```

l.
```
  7,104
+   609
_____
```

m. 427 + 348 ☐

n. 229 + 562 ☐

o. 75 + 25 ☐

p. 347 + 295 ☐

q. 7,217 + 1,664 ☐

r. 3,479 + 2,373 ☐

s. 2,076 + 4,124 ☐

t. 8,507 + 3,086 ☐

u. 653 + 39 ☐

v. 5,237 + 486 ☐

4 Solve the following problems using two different strategies.

Problem	First strategy	Second strategy
a. 127 + 426		
b. 355 + 25		
c. 429 + 152		

5 Solve the following problems.

a. (142 + 297) + 116

= (_____) + 116 = _____

b. 316 + 12 + 149

_____

_____

c. 98 + 312 + 175

_____

_____

d. (137 + 201) + (119 + 235)

= (_____) + (_____)

= _____

e. 411 + 98 + 312 + 175

_____

_____

f. 156 + 252 + 309 + 213

_____

_____

Place a smiley face

Subtraction strategies

Learn

Subtract 318 – 145

Here are some strategies that help you to subtract.

First strategy

Place value blocks.

- Show the greater number with place value blocks.

- Subtract the ones
  8 ones – 5 ones = 3 ones = 3

- Subtract the tens
  Since there are not enough tens to subtract, decompose 1 hundred as 10 tens.
  11 tens – 4 tens = 7 tens = 70
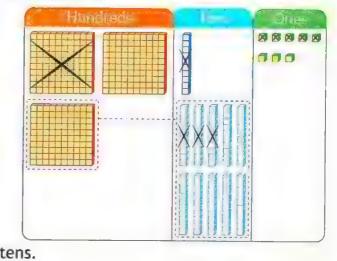
- Subtract the hundreds. 2 hundreds – 1 hundred = 1 hundred = 100

- Add the values to find the difference **100 + 70 + 3 = 173**

Hundreds	Tens	Ones

Second strategy

Number line hops.

- Decompose the smaller number

- The first hop in the number line is subtracting hundreds

- The second hop in the number line is subtracting tens.

- The third hop in the number line is subtracting ones.
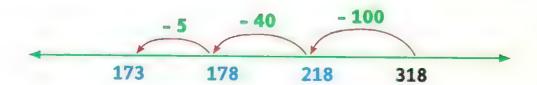
$145 = 100 + 40 + 5$

$318 - 100 = 218$

$218 - 40 = 178$

$178 - 5 = 173$

$$-5 \qquad -40 \qquad -100$$

173   **178**   **218**   **318**

Subtracting with regrouping

o Start by subtracting the ones moving to the left.

$$
\begin{array}{r}
2 \ \ 11 \\
\cancel{3}\cancel{1}8 \\
-\ \ 1\,4\,5 \\
\hline
1\,7\,3
\end{array}
$$

Check 🔍 **Using fact family**

o Add the difference to the subtrahend
If you get minuend, then your check
and your answer is correct

Since, $318 - 145 = 173$

| minuend | subtrahend | difference |

Fact family

$318 - 145 = 173$

$318 - 173 = 145$

$173 + 145 = 318$

$145 + 173 = 318$

Then : $173 + 145 = 318$

So, 173 is the correct answer.

*These strategies can be used in subtraction of 3-digit number
and more or less digits.*

Check 🔍

Use any strategy to find the difference of 365 - 280.

Check your answer using fact families.

Notes for parents

• Ask your child to find the difference of 535 − 280 using different strategies.

Subtraction strategies

1 Use the number line to subtract each of the following.

a.
$$
\begin{array}{r}
8\,2\,5 \\
-\ 2\,1\,0 \\
\hline
\end{array}
$$

Work area

b.
$$
\begin{array}{r}
5\,6\,0 \\
-\ 3\,5\,0 \\
\hline
\end{array}
$$

Work area

c.
$$
\begin{array}{r}
5\,3\,8 \\
-\ 2\,3\,5 \\
\hline
\end{array}
$$

Work area

d.
$$
\begin{array}{r}
6\,3\,0 \\
-\ 1\,2\,5 \\
\hline
\end{array}
$$

Work area

e.
$$
\begin{array}{r}
8,8\,2\,0 \\
-\ 6\,2\,3 \\
\hline
\end{array}
$$

Work area

f.
$$
\begin{array}{r}
7,6\,5\,2 \\
-\ 4,0\,7\,1 \\
\hline
\end{array}
$$

Work area

2 Subtract.

a.
$$\begin{array}{r} 591 \\ -\ 342 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 436 \\ -\ 129 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 630 \\ -\ 215 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 442 \\ -\ 324 \\ \hline \end{array}$$

e.
$$\begin{array}{r} 156 \\ -\ 28 \\ \hline \end{array}$$

f.
$$\begin{array}{r} 309 \\ -\ 41 \\ \hline \end{array}$$

g.
$$\begin{array}{r} 239 \\ -\ 159 \\ \hline \end{array}$$

h.
$$\begin{array}{r} 670 \\ -\ 237 \\ \hline \end{array}$$

i.
$$\begin{array}{r} 7,264 \\ -\ 5,158 \\ \hline \end{array}$$

j.
$$\begin{array}{r} 6,418 \\ -\ 4,238 \\ \hline \end{array}$$

k.
$$\begin{array}{r} 7,657 \\ -\ 6,238 \\ \hline \end{array}$$

l.
$$\begin{array}{r} 8,712 \\ -\ 420 \\ \hline \end{array}$$

m. $383 - 124$ _____

n. $626 - 108$ _____

o. 📖 $780 - 450$ _____

p. 📖 $925 - 610$ _____

q. 📖 $5,548 - 3,315$ _____

r. 📖 $1,759 - 1,255$ _____

s. 📖 $2,550 - 1,225$ _____

t. $8,742 - 351$ _____

u. $6,472 - 3,091$ _____

v. $8,067 - 2,574$ _____

3 Solve the following subtraction problems using two different strategies.

Problem	First strategy	Second strategy
a. 651 – 123		
b. 735 – 206		
c. 127 – 35		
d. 4,219 – 1,777		

4 Solve each subtraction problem using any strategy you choose. Use fact families to check your answer.

Problem	Work area	Check your answer
a. 684 – 232		
b. 790 – 50		
c. 855 – 105		
d. 3,489 – 1,263		

Place a smiley face

Applications on addition and subtraction

Learn

Youssef has **237** blocks, Maged has **148** blocks.

How many blocks do they have all together ?

Look for keyword to solve.

All together

Decide if you add or subtract.

(Add)   Subtract

Hint :

Some keywords of addition :
- total   • all together
- sum   • in all
- and   • add
- join

Solve the problem.

①

The number of all blocks = **237 + 148**

= **385** blocks.

The school library had **3,640** books for borrowing.

During one week **1,280** of them were borrowed.

How many books were left ?

Look for keyword to solve.

Left

Decide if you add or subtract.

Add   (Subtract)

Hint :

Some keywords of subtraction :
- left
- how many more?
- how many less?
- take away   • remain
- difference   • subtract

Solve the problem.

⑤⑭

The left books = 3 , $\cancel{6}\cancel{4}$ 0 − 1 , 280

= **2,360** books.

Notes for parents
- Ask your child to solve word problems using other strategies he/she has learned such as place value blocks, number line hops or adding/subtracting with regrouping.

Applications on addition and subtraction

From the school book

Read each story problem and decide on a strategy to solve it show your work of each problem. Some problems might have more than one step to be solved. Read carefully.

a. Amr saved 365 pounds in one year. The next year he saved 475 pounds.
What is the total amount he saved ?

b. There are 365 days in one year. If 147 days have passed since the beginning of the year. **How many days are left in the year ?**

c. The school arranged a trip to pyramids. 1,355 students from primary stage and 1,420 from preparatory and secondary stages are going.
How many students are going in all stages ?

d. Bassem's book has 370 pages. He has already read 139 pages.
How many pages does Bassem have left to read ?

e. Three boxes filled with marbles were just delivered to the factory.
If each box is filled with 435 marbles.
How many marbles were delivered in all ?

_____

_____

_____

f. 📖 The library can hold 2,475 books, but 525 books are out on loan and 137 books are missing.
How many books are there in the library right now ?

_____

_____

_____

g. Sami had 6,000 L.E. to spend. He bought a new mobile for 3,250 L.E. and a speaker for 675 L.E.
How much money does have left with him ?

_____

_____

_____

h. 📖 Amir's family is saving to buy a new TV. The TV costs 4,590 L.E. on sale.
They have saved 2,410 L.E. so far.
How much more money do they need before they can buy the TV ?

_____

_____

_____

Place a smiley face

• Capacity
• Reading capacity

Learn 1 Capacity

Vocabulary

Liquid
is that can take the shape of its container.

○ Capacity is the amount of liquid a container can hold.

○ Units of capacity are :

a **liter** (L) used to measure large amounts and

a **milliliter** (mL) used to measure small amounts.

For example :

This water bottle holds **1 liter**.

A dropper holds about **1 milliliter**.

○ There are **1,000 milliliters** in **1 liter**.
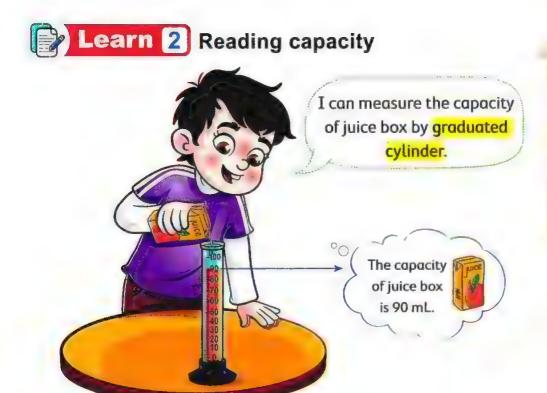
$$\text{1 liter (L)} = \textbf{1,000 milliliters (mL)}$$

So, 2 L = 2,000 mL , 3 L = 3,000 mL , ...

Check

Choose the unit you would use to measure the capacity of each.

○ L ○ mL	○ L ○ mL	○ L ○ mL
○ L ○ mL	○ L ○ mL	○ L ○ mL

Notes for parents

• Let your child think about some containers at home, then determine 2 containers might hold more than 1 liter.

Reading capacity
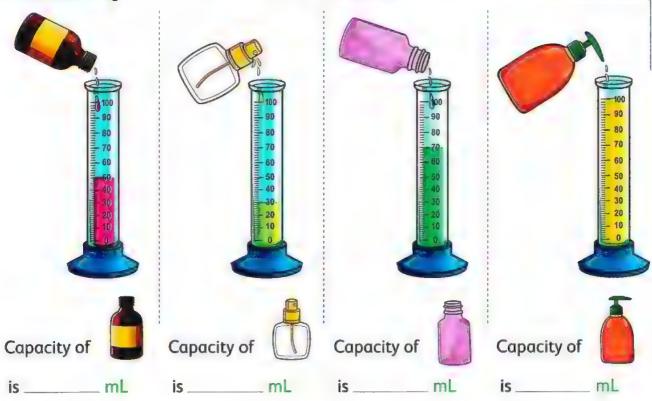
I can measure the capacity of juice box by **graduated cylinder.**

The capacity of juice box is 90 mL.

Check Write the capacity for each of the following.

Capacity of is _____ mL

Capacity of is _____ mL

Capacity of is _____ mL

Capacity of is _____ mL
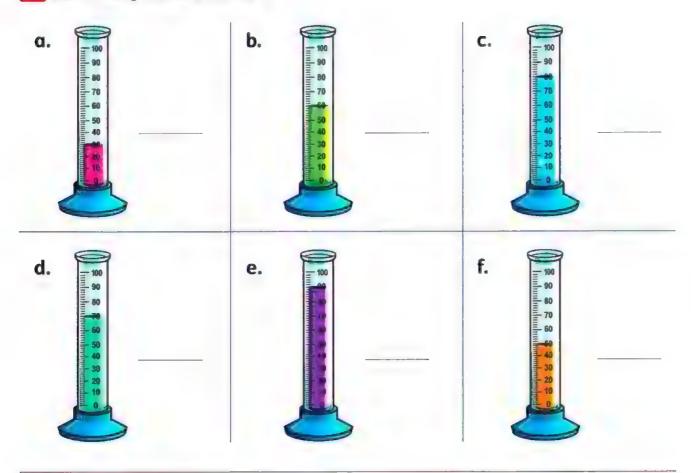
Notes for parents
• Let your child use a graduated cylinder to measure a small milk box.
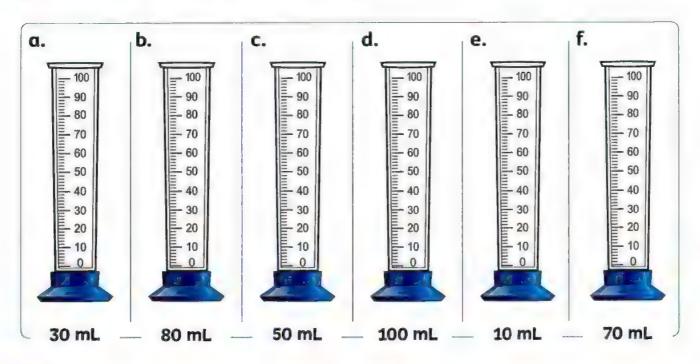
- Capacity
- Reading capacity

1 Choose the better estimation for each.

a.
○ 1 mL ○ 1 L

b.
○ 300 mL ○ 300 L

c.
○ 10 mL ○ 10 L

d.
○ 40 mL ○ 40 L

e.
○ 2 mL ○ 2 L

f.
○ 500 mL ○ 500 L

g.
○ 200 mL ○ 200 L

h.
○ 3 mL ○ 3 L

i.
○ 350 mL ○ 350 L

j.
○ 2 mL ○ 2 L

k.
○ 10 mL ○ 10 L

l.
○ 50 mL ○ 50 L
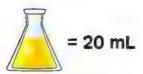
2 How many mL are there ?

a.

_____

b.

_____

c.

_____

d.

_____

e.

_____

f.

_____
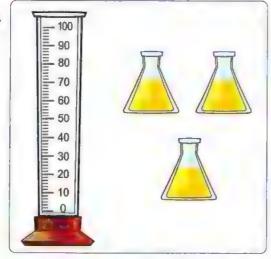
3 Color to reach the given measures.
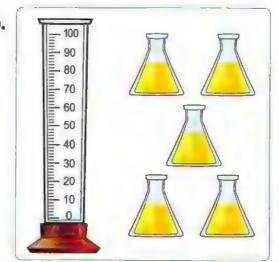
a.

30 mL

b.

80 mL

c.

50 mL

d.

100 mL

e.

10 mL

f.

70 mL

4 Color to reach the required measures.

 = 20 mL

a.

b.

c.

d.

---

5 Complete the following.

a. 5 L = _____ mL

b. 9 L = _____ mL

c. 3,000 mL = _____ L

d. 4,000 mL = _____ L

e. 25 L = _____ mL

f. 37,000 mL = _____ L

g. 10 Liters = _____ milliliters

h. 7 Liters = _____ milliliters

i. 75,000 milliliters = _____ Liters

j. 1,000 milliliters = _____ Liter
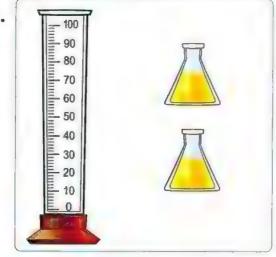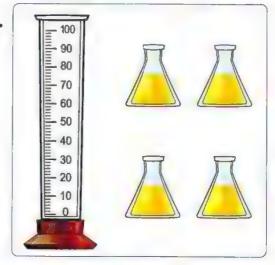
6 Choose the correct answer.

a. 3 L = ———— mL   (30 or 300 or 3,000)

b. 14 liters = ———— milliliters   (140 or 14,000 or 1,400)

c. 10 L = ———— mL   (1,000 or 100 or 10,000)

d. A perfume bottle is measured by ————   (mL or L)

e. Water in a bathtub is measured by ————   (mL or L)

f. The graduated cylinder is a tool for measuring ————

(capacity or tall or weight)

g. The capacity of a soda can could be ————   (330 L or 330 mL)

h. 2,000 mL = ———— L   (200 or 2 or 20)

i. 70,000 mL = ———— L   (700 or 7 or 70)

j. The liter is a unit used to measure ————

(tall or temperature or capacity)

k. Milk in a bottle is measured by ————   (L or mL)

l. 3 L + 2 L = ———— mL   (5 or 500 or 5,000)

m. 5,000 mL – 2,000 mL = ———— L   (2 or 3 or 4)

n. 2 L + 1,000 mL = ———— L   (2 or 3 or 4)

o. Petrol in a car is measured by ————   (mL or L)

p. Soda in a can is measured by ————   (mL or L)

Challenge

7 Sameh drank 1,300 mL of water.
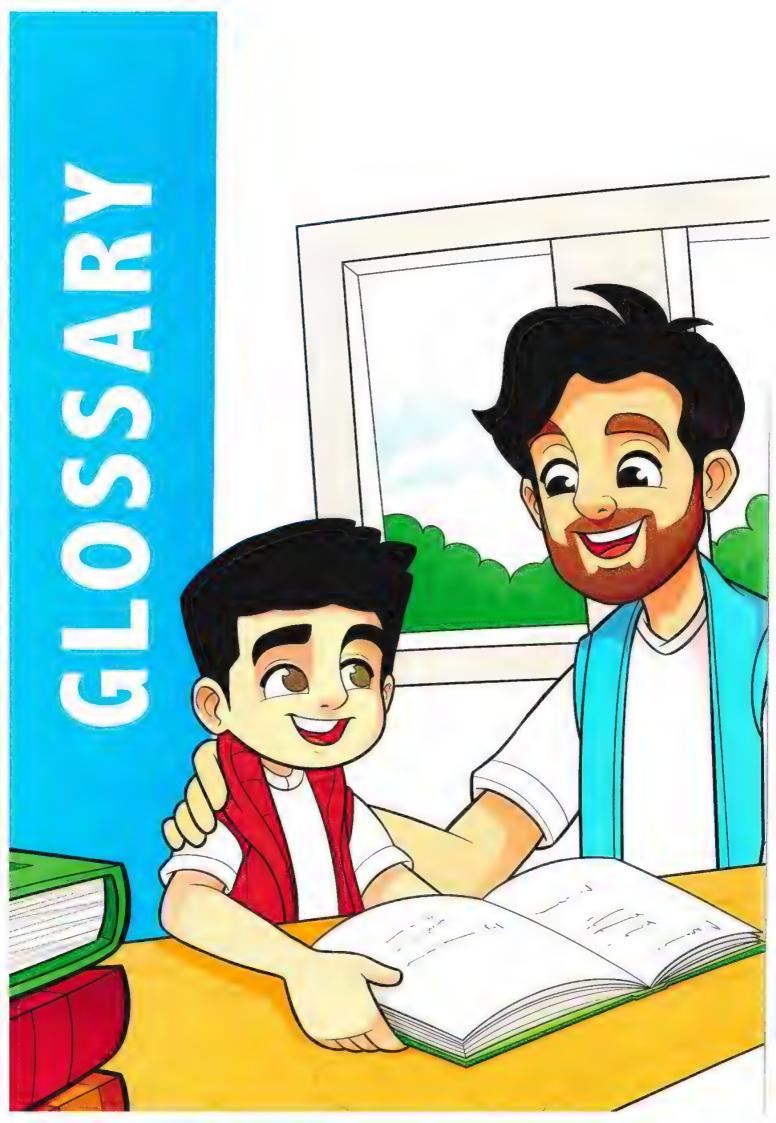
How much more or less than 1 L did he drink ?

————————————————————

————————————————————

Place a smiley face

GLOSSARY

A

accepted	مقبول
accumulative	تراكمى
actual	فِعلى
addition facts	حقائق الجمع
addition	الجمع
add	يجمع
analog clock	ساعة ذات عقارب
answer	يجيب / إجابة
area	مساحة
arrange	يرتب
array	مصفوفة
ascending	تصاعدى
assessment	تقييم
attribute	خاصية
axis	محور

B

bar graph	التمثيل البيانى بالأعمدة
belong	ينتمى
between	بين
big	كبير
break apart	يقسم

C

capacity	السعة
centimeter	سنتيمتر
challenge	تحدى
chart	مخطط
check	يتحقق
choose	يختار
circle	دائرة / يضع دائرة حول
clock	منبه
closed figure	شكل مغلق
color	يلوّن / لون
column	عمود
common	مشترك
commutative	إبدال
compare	يقارن
comparing	مقارنة

complete	يكمل
correct	صحيح
count	يعد
create	ينشئ

D

data	بيانات
decide	يقرر
decompose	يحلل
decomposing	التحليل
decrease	ينقص
descending	تنازلى
describe	يوصف
determine	يحدد
diagonal pattern	النمط القطرى
different	مختلف
digital clock	ساعة رقمية
digit	رقم
dimension	بعد
discover	يكتشف
distance	مسافة
distributive	توزيع
divide	يقسم
division	القسمة
doubling	مضاعفة
draw	يرسم

E

elapsed time	الوقت المنقضى
element	عنصر
equal to	مساوٍ لـ
estimate	يقدّر
estimating	تقدير
estimation	تقدير
expanded form	الصيغة الممتدة
explain	يفسر
extend	يمتد

F

fact family	حقائق رياضية
factor pair	زوج من العوامل
factor	عامل
fair share	نصيب عادل
favorite	مفضل
fewest	الأقل
fill in	يملأ

English	العربية
finding	إيجاد
find	يوجد
finger	إصبع
first	أولًا
frequency	التكرار

G

English	العربية
greater than	أكبر من
greatest	الأكبر
grid	شبكة
group	مجموعة

H

English	العربية
half	نصف
happen	يحدث
hexagon	سداسي الأضلاع
hint	تنويه
hop	قفز
horizontal	أفقي
hour hand	عقرب الساعات
hour	ساعة
hundred thousand	مائة ألف

I

English	العربية
incorrect	خطأ
increase	يزيد
intersect	يتقاطع

J

English	العربية
join	ينضم / يوصل

K

English	العربية
key	مفتاح

L

English	العربية
land on	يستقر
least	الأصغر
left	باقي / شمال
length	طول
less than	أقل من
line plots	مخطط التمثيل بالنقاط
linear measurement	قياس خطي
list	قائمة
liter	لتر
longest	الأطول
long	طويل

M

English	العربية
match	يوصل
mean	يعني
measure	يقيس
measuring	قياس
meter	متر
milliliter	ملليلتر
millimeter	ملليمتر
minute hand	عقرب الدقائق
minute	دقيقة
missing	مفقود / ناقص
mistake	خطأ
model	نموذج
most	الأكثر
multiple	مضروب
multiplication facts	حقائق الضرب
multiplication	الضرب
multiply	يضرب

N

English	العربية
next	تالٍ
number line	خط الأعداد
number pattern	نمط الأعداد
number	عدد

O

English	العربية
object	شيء
octagon	ثماني الأضلاع
open figure	شكل مفتوح
order	يرتب / ترتيب
organize	ينظم
organizing	تنظيم

P

English	العربية
palm	كف اليد
parallelogram	متوازي الأضلاع
parallel	موازي
pattern	نمط
pentagon	خماسي الأضلاع
perimeter	محيط
pictograph	التمثيل البياني بالصور
place value	القيمة المكانية
polygon	مضلع
previous	السابق
problem	مسألة
product	حاصل الضرب
put	يضع

Q

English	Arabic
quadrilateral	رباعي الأضلاع
quarter past	وربع
quarter to	إلا ربع
quotient	خارج القسمة

R

English	Arabic
rearrange	يعيد الترتيب
record	يسجل
rectangle	مستطيل
regrouping	إعادة التجميع
relation	علاقة
repeated addition	الجمع المتكرر
required	مطلوب
result	نتيجة
review	يراجع / مراجعة
rhombus	معين
right	يمين
ring	يحوط
row	صف
ruler	مسطرة
rule	قاعدة

S

English	Arabic
same	نفس الشيء
scale	مقياس
sentence	جملة
set	مجموعة
shape	شكل
shortest	الأقصر
short	قصير
show	يعرض
side	جانب / ضلع
similar	متشابه
situation	موقف
skip counting	العد بالقفز
small	صغير
solve	يحل
sort	يصنف
split	يقتسم / يشطر
square unit	وحدة مربعة
square	مربع

(continued)

English	Arabic
stand for	يشير إلى
standard form	الصيغة الرمزية
standard unit	العلامة المرجعية
statement	عبارة
story problem	مسألة كلامية
strategy	استراتيجية
subtraction	الطرح
subtract	يطرح
suitable	مناسب
sum	مجموع
symbol	رمز

T

English	Arabic
table	جدول
tally marks	علامات الإحصاء (العلامات التكرارية)
tell	يخبر
ten thousand	عشرة آلاف
thousand	ألف
tick	يضع علامة
time	الوقت
tip	تلميح
total	مجموع
trapezium	شبه المنحرف
triangle	مثلث
trick	خدعة

U

English	Arabic
unit	وحدة

V

English	Arabic
value	قيمة
venn diagram	شكل فن
vertex	رأس
vertical	رأسي
vertices	رؤوس
visual	بصري
vote	رأى

W

English	Arabic
way	طريقة / أسلوب
whether	إذا كان
width	عرض
word form	الصيغة الكلامية

EL-MOASSER

Mathematics

By a group of supervisors

STEP BY STEP REVISION   FREE PART

1

- Worksheets
- General Revision
- Final Assessments

3rd PRIMARY
FIRST TERM
2025

Index

First: Worksheets

Second: General Revision

Third: Final Assessments

First Worksheets

1 Circle the correct rule.

a. 75 , 65 , 55 , 45 , _____ | − 5 | − 10 | + 5 | + 10 |

b. 68 , 84 , 100 , 116 , _____ | − 14 | + 14 | − 16 | + 16 |

c. 200 , 175 , 150 , 125 , _____ | + 25 | − 25 | − 20 | + 20 |

2 Discover the pattern rule. Write the missing numbers.

Rule

a. 41 , 44 , 47 , 50 , _____ , _____

b. 80 , 70 , 60 , 50 , _____ , _____
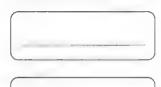
c. 115 , 120 , 125 , 130 , _____ , _____

3 Draw the pattern unit.
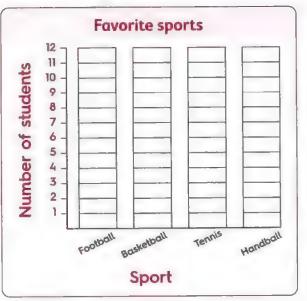
a.

b. **7 8 7 8 7 8**

c.

d.

e.

f.

1 Complete the tally table, then use it to make a bar graph.

Favorite sports

Sport	Tally	Number of students
Football	ⵊⵆⵆ ⵆⵆⵆ ||	_____
Basketball	ⵆⵆⵆ ||	_____
Tennis	ⵆⵆⵆ	_____
Handball	ⵆⵆⵆ |||	_____

Favorite sports

Number of students: 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1

Sport: Football, Basketball, Tennis, Handball

Answer the questions.

a. How many students liked basketball ? _____

b. Which sport got the most votes ? _____

c. Which sport got the fewest votes ? _____

---

2 Discover the pattern rule. Write the missing numbers.

Rule

a. 20 , 22 , 24 , _____ , _____

b. 30 , 25 , 20 , _____ , _____

c. 7 , 14 , 21 , _____ , _____
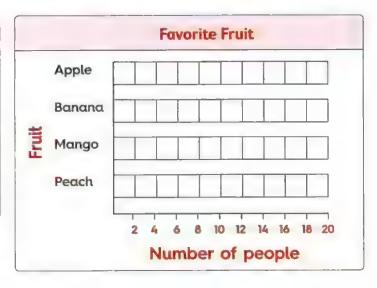
d. 3 , 13 , 23 , _____ , _____

e. 123 , 234 , 345 , _____ , _____

f. 900 , 700 , 500 , _____ , _____

3 Convert the same information from the tally table into a bar graph.

Favorite Fruit	
Type	**Tally**
Apple	卌 卌 ||
Banana	卌 卌
Mango	卌 卌 ||||
Peach	卌 |||

Favorite Fruit

Fruit: Apple, Banana, Mango, Peach

Number of people: 2 4 6 8 10 12 14 16 18 20
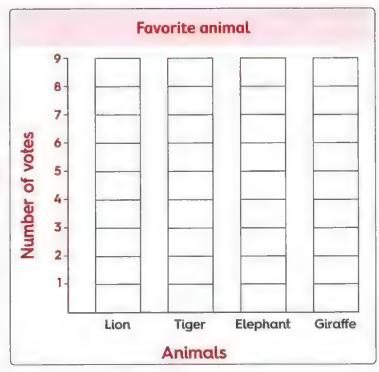
a. How many people liked banana best ? _____

b. How many people liked apple and mango ? _____

---

4 This is a survey about our favorite animal in the zoo.
Make a tally table and then use it to make a bar graph and answer the following questions.

Lion	Tiger	Elephant
Giraffe	Lion	Giraffe
Elephant	Tiger	Tiger
Giraffe	Lion	Giraffe
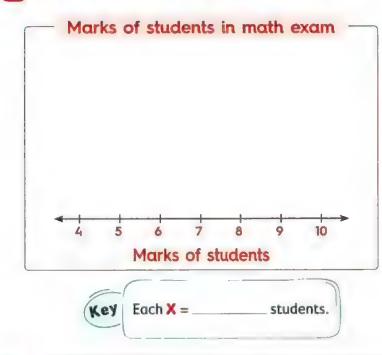
Favorite animal		
Kind	**Tally**	**Number**
Lion		_____
Tiger		_____
Elephant		_____
Giraffe		_____

Favorite animal

Number of votes: 1 2 3 4 5 6 7 8 9

Animals: Lion, Tiger, Elephant, Giraffe

a. Which animal is favored by the most ? _____

b. Which two animals have the same votes ? _____ , _____

c. How many persons voted for elephant ? _____

d. How many more persons voted for lion than elephant ? _____

7

1 Use the table to draw a line plot.

Marks of students in math exam

Marks of students

Key | Each **X** = _____ students.
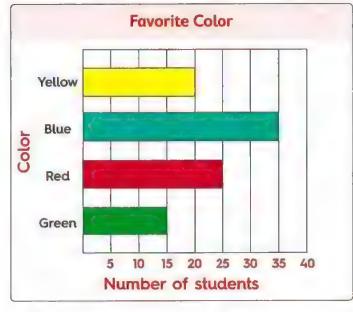
Marks of students	
Marks	Tally
4			
5							
6									
7										
8													
9								
10				

2 Use the bar graph to complete the tally table then, answer the following questions.

Favorite Color

Color

Number of students
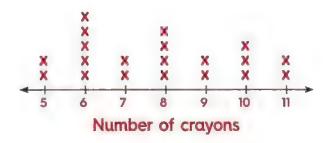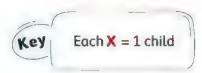
Favorite Color	
Color	Tally
Yellow	
Blue	
Red	
Green	

a. How many students liked red color ? _____

b. Which color is liked the least ? _____

c. Which color is liked the most ? _____

d. How many students liked red color and green color ? _____

3 Use the line plot to answer the questions.
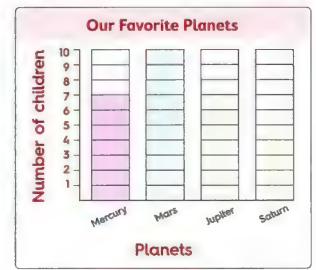
a. How many children have 8 crayons ? _____

b. How many children have 6 crayons ? _____

c. How many children have more than 9 crayons ? _____

d. How many children have less than 7 crayons ? _____

Number of crayons

Key   Each **X** = 1 child

---

4 Use the bar graph to answer the questions.

a. How many children choose Mars ? _____

b. Which planet did the fewest children choose ? _____

c. How many children choose Mercury ? _____

d. How many more votes did the Jupiter get than the Saturn ? _____

Our Favorite Planets

Number of children

Mercury   Mars   Jupiter   Saturn

Planets

---
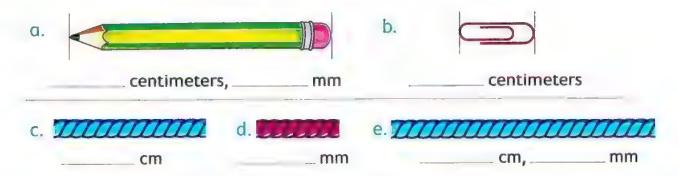
5 Find the rule. Extend the pattern.

a. 40 , 37 , 34 , _____ , _____

b. 6 , 12 , 18 , _____ , _____

c. 9 , 19 , 29 , _____ , _____

d. 4 , 9 , 7 , 12 , _____ , _____

e. , _____ , _____

f. , _____ , _____

g. , _____ , _____

Till lessons 4 to 6 - chapter 1

1 Use a ruler to measure the length of each of the following.

a.

_____ centimeters, _____ mm

b.

_____ centimeters

c.

_____ cm

d.

_____ mm

e.

_____ cm, _____ mm

---

2 Choose the correct answer.
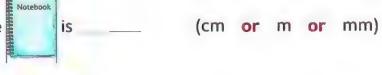
a. 30 mm = _____ cm   (3 **or** 10 **or** 30 **or** 300)

b. 20 cm = _____ mm   (2 **or** 10 **or** 20 **or** 200)

c. The suitable unit to measure [Notebook] is _____   (cm **or** m **or** mm)

d. The suitable unit to measure [tree] is _____   (m **or** cm **or** mm)
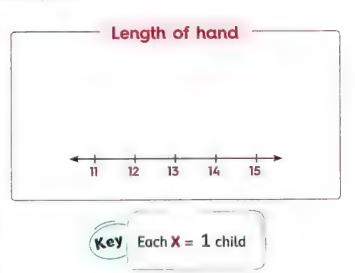
e. 9 mm ◯ 9 m   (< **or** = **or** >)

---

3 Complete the tally table and the line plot.

Length of hand		
Length	Tally	Number
11 cm	卌 II	____
12 cm	卌 I	____
13 cm	卌 III	____
14 cm	卌	____
15 cm	III	____

Length of hand

11 12 13 14 15

Key Each **X** = **1** child

1 **Complete.**

a. 5 cm = _____ mm
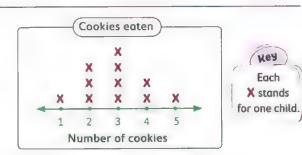
b. 250 cm = _____ m and _____ cm

c. The length of the object ⬭ = _____ cm

d. 49 , 48 , 47 , 46 , _____ , _____ (in the same pattern)

---

2 **Choose the correct answer.**

Cookies eaten

Number of cookies

Key
Each **X** stands for one child.

a. By using the opposite line plot.
How many children ate 2 cookies ?
(1 **or** 2 **or** 3 **or** 4)

b. 18 , 23 , 28 , 33 , _____ (in the same pattern)   (38 **or** 43 **or** 37 **or** 33)

c. 20 mm = _____ cm   (20 **or** 2 **or** 200 **or** 22)

d. The length of the object ▭ = _____ mm   (1 **or** 5 **or** 2 **or** 10)

---

3 **Put (✓) to the correct statement or (✗) to the incorrect statement.**

a. 5 m and 3 m = 8 cm   (   )

b. 8 m = 800 cm   (   )

c. The length of the object 🍴 = 4 cm   (   )
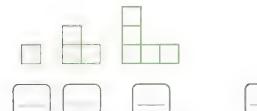
d. 30 , 32 , 34 , 36 , 39 , 40 are all in a correct same pattern.   (   )

---

4 **Arrange the following lengths in a descending order.**
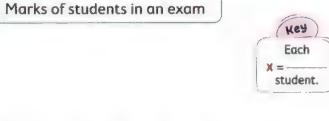
70 mm , 70 cm , 77 mm , 77 cm

The order is : _____ , _____ , _____ , _____

5 Draw what might come next in the pattern. Write the number of items in each step.

6 Complete using (< , = or >).

a. 7 m ☐ 7 cm
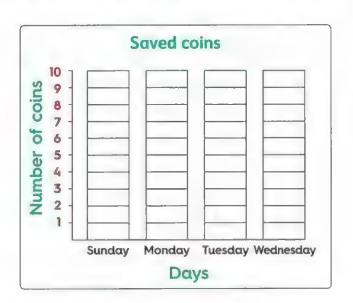
b. 4 m ☐ 40 cm

c. 20 mm ☐ 20 cm

d. 70 mm ☐ 9 cm

7 Use the table to draw a line plot.

Marks of students in an exam

Key

Each

x = ——— student.

| 15 | 16 | 17 | 18 | 19 | 20 |

Number of students

Marks of students in an exam	
Marks	**Number of students**
15	2
16	1
17	3
18	5
19	4
20	2

8 Count the tallies. Write the total. Color the bar graph to show the data.

Saved coins		
Day	**Tally**	**Number**
Sunday	|||	____
Monday	‖‖	____
Tuesday	‖‖ |||	____
Wednesday	‖‖		____

Saved coins

Number of coins

10 9 8 7 6 5 4 3 2 1

Sunday Monday Tuesday Wednesday

Days

1 By using the following table complete.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
9	2	1	4	5	8

a. Standard form : ———————————————————————

b. Expanded form : ———————————————————————

c. Word form   : ———————————————————————

---

2 Write the following numbers in order from least to greatest.

7,563 , 4,792 , 978 , 8,460

The order is : ———— , ———— , ———— , ————

---

3 Write the greatest and the least 4-digit number formed from 3 , 9 , 0 and 7.

a. The greatest number is ————   b. The least number is ————

---

4 Choose the correct answer.

a. $7,000 + 30 + 8 =$ ———— (in standard form)

(7,380 **or** 7,038 **or** 7,083 **or** 7,830)

b. The value of the digit 5 in the number 3,572 is ————

(5 **or** 50 **or** 500 **or** 5,000)

c. Three thousand, two hundred six in standard form is ————

(3,260 **or** 3,206 **or** 3,620 **or** 3,226)

d. The place value of the digit 2 in the number 2,751 is ————

(Ones **or** Tens **or** Hundreds **or** Thousands)

e. 300 tens = ———— hundreds.   (3 **or** 30 **or** 300 **or** 3,000)

f. 30 mm = ———— cm   (3 **or** 30 **or** 300 **or** 3,000)

g. 12 cm = ———— mm   (12 **or** 120 **or** 1,200 **or** 12,000)

h. The tally marks 卌 ||| represent ————   (5 **or** 6 **or** 7 **or** 8)
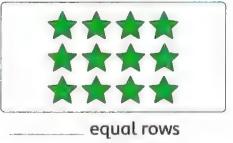
1 Choose the correct answer.

a. The place value of the digit 7 in the number 375,128 is _____

(Tens **or** Hundreds **or** Thousands **or** Ten thousands)

b. The value of the digit 0 in the number 130,452 is _____

(0 **or** 10 **or** 1,000 **or** 100,000)

c. The smallest number formed from 3 , 7 , 8 , 4 , 9 and 0 is _____

(37,849 **or** 307,489 **or** 304,789 **or** 987,430)

d. $700,000 + 50,000 + 900 + 6 =$ _____

(7,596 **or** 750,906 **or** 75,960 **or** 705,906)

e. 33 , 38 , 43 , _____ (in the same pattern) (44 **or** 45 **or** 48 **or** 50)

---

2 Complete.

a. $74,000 =$ _____ tens.

b. _____ (in the same pattern)

c. Six hundred forty-two thousand, seven hundred thirteen = _____

(in standard form)

d. $97,350 = 90,000 +$ _____ $+ 300 + 50$

---

3 Compare, write "> , < or =".

a. 79,562 ◯ 81,563

b. 17,000 ◯ 17 hundreds

c. 87,521 ◯ Nine hundred thousand

d. $30,000 + 4,000 + 50$ ◯ 34,005

e. 30 cm ◯ 30 mm

f. 130 tens ◯ 13 hundreds

---

4 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. The place value of the digit 3 in the number 31, 654 is Hundred
   thousands.   (   )

b. The place value of the digit 7 in the number 731, 265 is 700,000   (   )

c. The value of the digit 5 in the number 576,123 is 500,000   (   )

d. The value of the digit 0 in the number 720,315 is Thousands.   (   )

e. Nine hundred thousand, nine hundred = 900,900   (   )

1 **Look at each, complete.**

a.

_____ equal rows
_____ in each row
_____ in all

b.
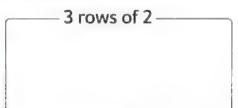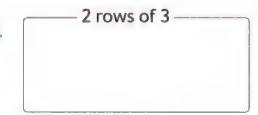
_____ equal rows
_____ in each row
_____ in all

2 **Create an array.**

a.
3 rows of 2

b.
2 rows of 3

3 **Choose the correct answer.**

a. The place value of the digit 0 in the number 401,731 is _____

(Ones **or** Hundreds **or** Thousands **or** Ten thousands)

b. 198,521 ◯ 2 hundred thousands (> **or** < **or** =)
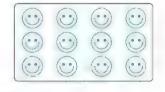
c. The greatest 6-digit number formed from 7, 8, 5, 4, 0 and 9 is _____

(405,789 **or** 540,789 **or** 987,450 **or** 987,540)

d. In the opposite array, the number of rows = _____

(3 **or** 4 **or** 12 **or** 15)

e. The value of the digit 8 in the number 841,003 is _____

(80 **or** 800 **or** 80,000 **or** 800,000)

4 **Write in expanded form.**

a. 314,052 = _____

b. 72 thousands = _____

c. 37,561 = _____

d. Fourteen thousand, thirty-one = _____

1 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $7 + 7 + 7 = 3 \times 7$ (   )

b. 5 groups of $2 = 5 \times 2$ (   )
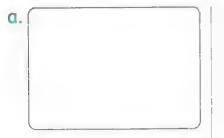
c. 4 groups of $9 = 4 + 4 + 4 + 4$ (   )

d. $9 \times 2 = 9 + 9$ (   )

e. 6 equal groups of $8 = 6 + 8$ (   )
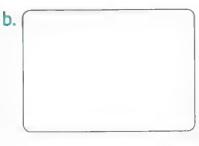
f. $6 \times 6 = 6 + 6 + 6 + 6$ (   )

---

2 Build the array according to the following. Write the multiplication sentence.

a.

3 rows of 4

___ × ___ = ___

b.

2 columns of 5

___ × ___ = ___

c.
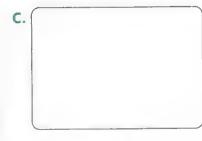
6 rows of 3

___ × ___ = ___

---

3 Join the place value of the digit **2** in each of the following.

a.   725,463 •   • Ones

b.   256,007 •   • Tens

c.   154,672 •   • Hundreds

d.   176,291 •   • Thousands

e.   452,700 •   • Ten thousands

f.   654,321 •   • Hundred thousands
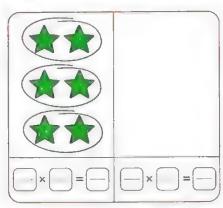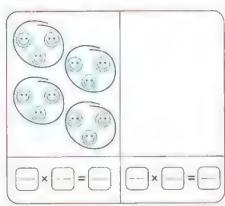
1 Write the multiplication sentence for each equal groups, then draw the equal groups that shows the commutative property.

a.

$\boxed{} \times \boxed{} = \boxed{}$ $\boxed{} \times \boxed{} = \boxed{}$
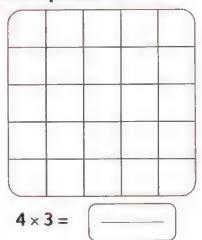
b.

$\boxed{} \times \boxed{} = \boxed{}$ $\boxed{} \times \boxed{} = \boxed{}$
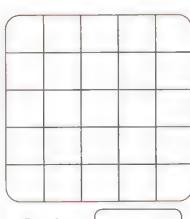
2 Draw the array on the grid according to its multiplication sentence. Write the product.

a.

$4 \times 3 =$ _____

b.

$5 \times 4 =$ _____

3 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $30,000 + 5,000 + 2 + 100 = 35,102$ ( )

b. 17 hundreds = 1,700 ( )

c. The value of the digit 6 in the number 36,217 is Thousands. ( )

d. 11,111 is the smallest 5-digit number. ( )

e. $9,999 > 11,111$ ( )

f. $3 \, m < 13 \, cm$ ( )

Assessment Chapter 2

1 Choose the correct answer.

a. The value of the digit 3 in 439,012 is _____ (300,000 **or** 30,000 **or** 3,000)

b. Two hundred fifty-eight thousand , seven hundred thirty-one in standard form is _____ (731,258 **or** 285,731 **or** 258,731)

c. 6,239 in expanded form is _____

$(6,000 + 200 + 30 + 9$ **or** $9,000 + 300 + 20 + 6$ **or** $2,000 + 600 + 90 + 3)$

d. 120 thousands ◯ 1,200 hundreds (> **or** < **or** =)

e. 451,679 ◯ 89,879 (> **or** < **or** =)

f. $3 \times 5 = 5 \times$ _____ (3 **or** 5 **or** 35)

2 Match.

a. $3 + 3 + 3 + 3$ b. 5×4 c. 2 rows of 3   d. 5 columns of 3

$5 + 5 + 5 + 5$ 3×5 2×3 $4 + 4 + 4$

3 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $5 + 5 + 5 + 5 + 5 = 5 \times 5$ (   )

b. $8 + 4,000 + 60 + 100 = 8,461$ (   )

c. The greatest number formed from 3 , 0 , 8 and 2 is 8,032 (   )

d. $5 \times 7 = 7 + 5$ (   )

4 Complete.

a. $9 + 9 + 9 = 9 \times$ _____

b. _____ $\times 7 = 7 \times 2$

c. 50 thousands and 50 = _____

d. 3 rows of 6 = _____ $\times$ _____ = _____

e. 2 groups of 5 = _____ + _____

f. The value of the digit 0 in any number equals _____

g.

_____ rows of _____

[ ] × [ ]

= [ ]

h.

_____ groups of _____

[ ] × [ ] = [ ]

---

5 a. **Arrange from the greatest to the least.**

100,369 , 812,926 , 99,512 , 766 , 812,437

The order is : _____ , _____ , _____ , _____ , _____

b. **Arrange from the least to the greatest.**

307,040 , 7,403 , 43,007 , 304,700

The order is : _____ , _____ , _____ , _____

---

6 Compare using "> , < or =".

a. 3,467   ◯ 3,164

b. 300 thousands   ◯ 3,000 hundreds

c. 132,045   ◯ 93,245

d. 548,176   ◯ 548,173

e. One hundred thousand   ◯ 99,999

f. 275 thousands and 6   ◯ 275,600

g. 25,600 tens   ◯ 256 thousands

h. 381,205   ◯ 83 thousands and 205

1 Complete.

a. 3×1 , 3×2 , 3×3 , 3×4 , _____ , _____ (in the same pattern)

b. $10 + 10 + 10 + 10 + 10 =$ _____ $\times 10$

c. 5 thousands , 6 hundreds and 31 ones = _____

d. 15 m = _____ cm

e. △ ■ △ ■ △ ■ _____ (in the same pattern)

2 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $50,000 + 300 + 5,000 + 6 = 55,360$ (   )

b. 5 groups of $3 = 5 + 5 + 5$ (   )

c. 1 cm = 100 mm   (   )

d. 50 hundreds = 5 thousands   (   )

e. The greatest 5-digit number is 99,990   (   )

3 Choose the correct answer.

a. The tally marks ⦀⦀ mean _____   (3 **or** 4 **or** 5)

b. 3 cm = _____ mm   (3 **or** 30 **or** 300)

c. $5 \times$ _____ $= 9 \times 5$ (5 **or** 9 **or** 0)

d. $9 \times 2 = 9 +$ _____   (2 **or** 11 **or** 9)

e. 95 , 85 , 75 , 65 , _____ (in the same pattern)   (55 **or** 65 **or** 35)

f. The length of the figure [✏] = _____ mm

     (6 **or** 60 **or** 600)
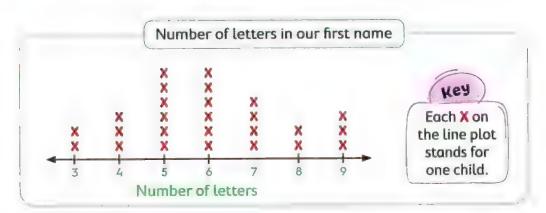
4 Match.
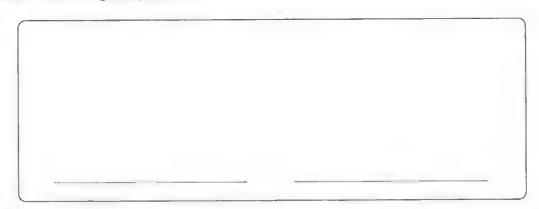
a. [2 cm] b. [2 m] c. [100 cm] d. [10 cm]

[20 mm] [1 m] [100 mm] [200 cm]

5 Use the line plot to answer the questions.

Number of letters in our first name

Number of letters

Key

Each **X** on the line plot stands for one child.

a. How many children have 5 letters in their first name ? _____ children.

b. What is the smallest number of letters in a child's first name ? _____ letters.

c. What is the greatest number of letters in a child's first name ? _____ letters.

6 Draw a model group. Then write an addition sentence and a multiplication sentence for 3 groups of 2.

_____   _____

7 a. Write the numbers in an ascending order.

| 7,482 | 54,658 | 954,201 | 12,158 |

The order is : _____ , _____ , _____ , _____

b. Write the numbers in a descending order.

| 83,987 | 8,315 | 833,400 | 833,312 |

The order is : _____ , _____ , _____ , _____

1 Choose the correct answer.

a. 80 mm = ———— cm   (8 **or** 80 **or** 800 **or** 8,000)

b. 370 thousands = ———— hundreds

(37 **or** 370 **or** 3,700 **or** 37,000)

c. The greatest number formed from 7, 8, 0, 2 and 5 is ————

(78,520 **or** 87,520 **or** 87,250 **or** 87,502)

d. If a guitar has 6 strings, then there are ———— strings in 2 guitars.

(6 **or** 8 **or** 10 **or** 12)

2 Complete.

a. 94,562 = 90,000 + ———— + 500 + ———— + ————

b. The opposite array is ———— rows of ————

c. 6 × 5 = 5 × ————

d. If Ayman runs 2 hours every day, then the number of running hours in 5 days is ———— hours.

3 Read and solve. You may use counters to solve.

(a) Sara had a bag of peanuts to share with her friends . She gave 3 friends 4 peanuts each. How many peanuts did Sara give away ?

————————————————————

(b) There are 7 mangoes in a box. How many mangoes are there in 3 boxes ?

————————————————————

(c) A bag of balls holds 5 balls. How many balls are there in 3 bags ?

————————————————————

1 **Use the chart. Find each product.**

a. $3 \times 4 = $ _____

b. $2 \times 6 = $ _____

c. $0 \times 9 = $ _____

d. $4 \times 6 = $ _____

e. $1 \times 8 = $ _____

f. $2 \times 5 = $ _____

g. $3 \times 6 = $ _____

h. $4 \times 8 = $ _____

i. $3 \times 8 = $ _____

j. $2 \times 4 = $ _____

k. $3 \times 9 = $ _____

l. $4 \times 4 = $ _____

m. $4 \times 5 = $ _____

n. $5 \times 0 = $ _____

o. $2 \times 7 = $ _____

2 **Choose the correct answer.**

a. _____ $\times 4 = 40$ (6   **or**   2   **or**   5   **or**   10)

b. _____ is a multiple of 2 and 3 together.   (4   **or**   9   **or**   12   **or**   15)

c. The least number formed from the digits 7 , 6 , 0 , 4 , 8 and 2 is _____

       (24,678   **or**   204,678   **or**   246,780   **or**   876,420)

d. The place value of the digit 4 in the number 124,023 is _____

       (Tens   **or**   Hundreds   **or**   Thousands   **or**   Ten thousands)

e. _____ $\times 3 = 15$ (3   **or**   2   **or**   5   **or**   6)

3 **Use the chart.**

a. Write the multiples of 2 greater than 30 and smaller than 60

_____

b. Write the multiples of 3 greater than 30 and smaller than 60

_____

c. Write three common multiples of 2 and 3 greater than 30 and smaller than 60

_____

Sheet 12

1 Use the chart. Find each product.

a
- $6 \times 5 =$ ———
- $7 \times 4 =$ ———
- $6 \times 2 =$ ———
- $6 \times 6 =$ ———
- $7 \times 6 =$ ———
- $5 \times 7 =$ ———
- $7 \times 0 =$ ———
- $3 \times 9 =$ ———
- $2 \times 10 =$ ———

b
- $7 \times 3 =$ ———
- $5 \times 9 =$ ———
- $7 \times 7 =$ ———
- $5 \times 6 =$ ———
- $5 \times 5 =$ ———
- $6 \times 8 =$ ———
- $3 \times 5 =$ ———
- $5 \times 4 =$ ———
- $7 \times 9 =$ ———

c
- $6 \times 4 =$ ———
- $6 \times 10 =$ ———
- $1 \times 3 =$ ———
- $7 \times 5 =$ ———
- $6 \times 3 =$ ———
- $7 \times 8 =$ ———
- $0 \times 8 =$ ———
- $6 \times 9 =$ ———
- $5 \times 8 =$ ———

2 Compare using ">, < or =".

a. $75,865 \bigcirc 101,213$

c. $7 \times 4 \bigcirc 3 \times 9$

e. $7 \times 7 \bigcirc 5 \times 8$

g. $30 \text{ mm} \bigcirc 3 \text{ cm}$

i. $7 \times 0 \bigcirc 7 + 0$

b. $32 \text{ thousands} \bigcirc 720 \text{ tens}$

d. $7 \times 0 \bigcirc 9 \times 1$

f. $5 \times 6 \bigcirc 3 \times 10$

h. $5 + 5 + 5 + 5 \bigcirc 5 \times 5$

j. $7 + 1 \bigcirc 7 \times 1$

3 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. 1 is a multiple of 7   (   )

b. $7 \times 0 = 0 \times 6$ (   )

c. $7 + 7 + 7 + 7 + 7 + 7 + 7 < 6 \times 7$ (   )

d. $5 \times 5 < 7 \times 4$ (   )

e. 65 is a multiple of 5   (   )

f. 200 tens < 20 hundreds   (   )

g. 6 groups of 9 < 7 groups of 8   (   )

24

1 **Use the chart. Find each product.**

a
- $8 \times 2 = $ ———
- $9 \times 5 = $ ———
- $8 \times 6 = $ ———
- $10 \times 2 = $ ———
- $8 \times 10 = $ ———
- $10 \times 6 = $ ———
- $9 \times 6 = $ ———
- $8 \times 7 = $ ———
- $9 \times 9 = $ ———
- $8 \times 9 = $ ———

b
- $10 \times 3 = $ ———
- $8 \times 1 = $ ———
- $9 \times 7 = $ ———
- $8 \times 5 = $ ———
- $10 \times 7 = $ ———
- $9 \times 8 = $ ———
- $10 \times 5 = $ ———
- $8 \times 4 = $ ———
- $9 \times 3 = $ ———
- $8 \times 3 = $ ———

c
- $6 \times 4 = $ ———
- $5 \times 6 = $ ———
- $6 \times 6 = $ ———
- $4 \times 3 = $ ———
- $7 \times 10 = $ ———
- $6 \times 3 = $ ———
- $4 \times 4 = $ ———
- $0 \times 7 = $ ———
- $8 \times 8 = $ ———
- $6 \times 9 = $ ———

2 **Put (✓) to the correct statement or (✗) to the incorrect statement.**

a. Seven hundred two thousand, seventy-two in standard form = 702, 072 (   )

b. 7 m = 70 millimeters. (   )

c. The place value of the digit 7 in the number 372, 604 is Ten thousands. (   )

d. The tally marks |||| |||| ||| represent 553 (   )

e. 9 equal groups of 10 = 9×10 (   )

f. $8 \times 0 = 0 \times 9$ (   )

g. 13 hundreds = 130 tens (   )

3 **Use the chart. Write five common multiples of 5 and 10 greater than 10 and smaller than 100**

- Multiples of 5 are _____
- Multiples of 10 are _____
- Common multiples of 5 and 10 are _____ , _____ , _____ , _____ and _____
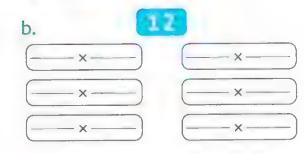
1 Complete using the given numbers. Use every number more than one time.

1	2	3	6

___ × ___ = 6
___ × ___ = 6
___ × ___ = 6
___ × ___ = 6

1	9	3	27

___ × ___ = 27
___ × ___ = 27
___ × ___ = 27
___ × ___ = 27

2	3	4	6

___ × ___ = 12
___ × ___ = 12
___ × ___ = 12
___ × ___ = 12

---

2 Write each factor pair and the factors of each number.

a. **20**

___ × ___   ___ × ___
___ × ___   ___ × ___
___ × ___   ___ × ___

Factors are : _____

b. **12**

___ × ___   ___ × ___
___ × ___   ___ × ___
___ × ___   ___ × ___

Factors are : _____

---
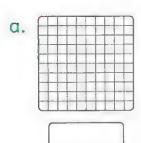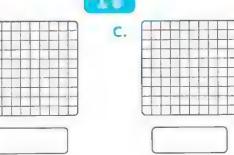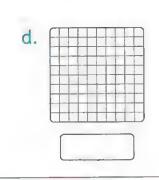
3 Build four different arrays according to the given number.

10

a.   b.   c.   d.

---
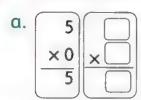
4 Join the equal results.

a. 9×0 b. 5×8 c. 1×12 d. 3×6 e. 3×8
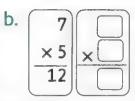
2×6 2×9 4×6 1×0 4×10

5 Find each product that is not correct. Write it correctly.

a.
$$\begin{array}{r} 5 \\ \times\,0 \\ \hline 5 \end{array}$$ $\times \boxed{}$ over $\boxed{}$

○ Correct

○ Not correct

b.
$$\begin{array}{r} 7 \\ \times\,5 \\ \hline 12 \end{array}$$ $\times \boxed{}$ over $\boxed{}$

○ Correct

○ Not correct

c.
$$\begin{array}{r} 6 \\ \times\,3 \\ \hline 18 \end{array}$$ $\times \boxed{}$ over $\boxed{}$

○ Correct

○ Not correct

d.
$$\begin{array}{r} 8 \\ \times\,1 \\ \hline 9 \end{array}$$ $\times \boxed{}$ over $\boxed{}$

○ Correct

○ Not correct

---

6 Find the result.

a. $7 \times 6 =$ ———

b. $9 \times 6 =$ ———

c. $4 \times 9 =$ ———

d. $7 \times 10 =$ ———

e. $8 \times 8 =$ ———

f. $5 \times 7 =$ ———

g. $2 \times 8 =$ ———

h. $7 \times 9 =$ ———

i. $6 \times 8 =$ ———

---
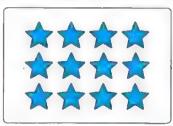
7 Look at each array. Complete.

a.

———— equal rows

———— in each row

———— in all

b.

———— equal columns
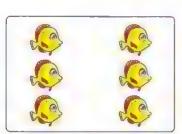
———— in each column

———— in all

---

8 Choose the correct answer.

a. $300 \text{ mm} =$ ——— cm   (3 **or** 30 **or** 300 **or** 3,000)

b. Three thousand, five = ——— (in standard form)

(3,005 **or** 3,500 **or** 3,050 **or** 350)
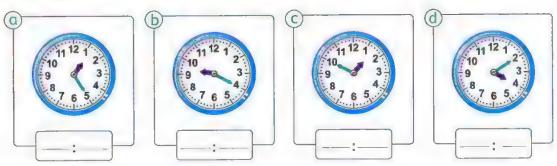
c. The place value of the digit 7 in the number 372,041 is ————

(Tens **or** Hundreds **or** Thousands **or** Ten thousands)

d. $7 \times 4 >$ ————   (5×8 **or** 3×10 **or** 3×9 **or** 6×5)

e. $19,562 \bigcirc 9,000 + 10,000 + 60 + 600$ (> **or** < **or** =)

1 Write the time.

a
b
c
d

___ : ___   ___ : ___   ___ : ___   ___ : ___
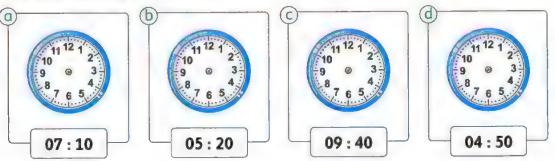
2 Draw the clock hands.

a **07 : 10**   b **05 : 20**   c **09 : 40**   d **04 : 50**

3 Mina left home at 7 : 00

It took him 40 minutes to get to school.

What time did he get to school ?

___ : ___

4 Complete.

a. The value of the digit 4 in the number 34,226 is _____

b. $7 \times 8 =$ _____

c. 7 cm = _____ mm

d. $9 \times 2 =$ _____

e. $4 \times 6 =$ _____

f. The number that the minute hand will point to when the time is 03 : 25
   is _____

g. 4 equal groups of 7 = _____ × _____ = _____
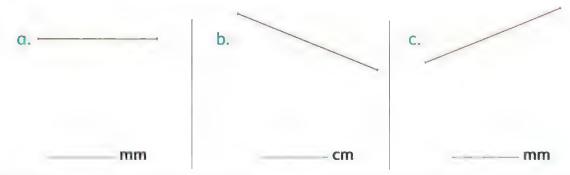
h. The elapsed time from 05 : 00 to 05 : 50 equals _____ minutes.

5 Petra started playing gymnastic at 04 : 00, she played for 45 minutes. What time did she finish ?

_____

Sheet 16

Till lessons 8 & 9 - chapter 3
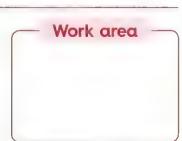
1 Draw to show your work.

(a) Divide **6** into **3** equal groups

_____ in each group.

(b) Divide **12** into **4** equal groups

_____ in each group.

---

2 Measure the length of each line.

a. _____ mm

b. _____ cm

c. _____ mm

---

3 Sara has 20 apples and wants to put them in 5 plates.

How many apples are there in each plate ?

_____

Work area

---

4 Choose the correct answer.

a. The least number formed from 7 , 0 , 4 , 1 , 2 , 9 is _____

(12,479 **or** 120,479 **or** 102,479 **or** 124,790)

b. The value of the digit 3 in the number 753,421 is _____

(30 **or** 300 **or** 3,000 **or** 30,000)

c. The number that the minute hand will point to when the time is 12 : 40
is _____   (6 **or** 7 **or** 8 **or** 9)

d. _____ is a factor of 12   (7 **or** 5 **or** 6 **or** 8)

e. $6 \times 1 =$ _____   (0 **or** 6 **or** 7 **or** 8)

1 **Find the result.**

a. $12 \div 3 = $ ———

b. $35 \div 5 = $ ———

c. $42 \div 6 = $ ———

d. $28 \div 4 = $ ———

e. $27 \div 3 = $ ———

f. $15 \div 5 = $ ———

g. $54 \div 6 = $ ———

h. $10 \div 10 = $ ———

i. $32 \div 4 = $ ———

j. $40 \div 10 = $ ———

k. $24 \div 4 = $ ———

l. $10 \div 2 = $ ———

2 **Complete.**

a. $4 \times$ ——— $= 24$

b. ——— $\div 3 = 4$

c. ——— $\times 5 = 35$

d. $6 \times$ ——— $= 18$

e. ——— $\div 7 = 8$

f. ——— $\times 6 = 54$

g. $18 \div$ ——— $= 6$

h. $2 \times 7 = $ ———

i. $3 \times$ ——— $= 15$
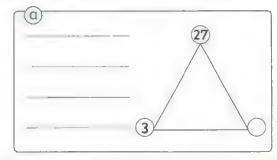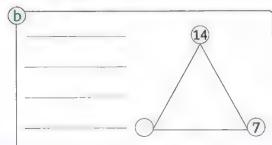
3 **Find the missing factor in each triangle**

then write the four number sentences that go with the fact family.

4 **Write and draw the hands on the clock to show the time.**

Bassem started playing football at 8 : 00

He played for 25 minutes.

What time did he finish ?

——— : ———

5 **Write in standard form each of the following.**

a. Two thousand, seven hundred, thirty-two = ———

b. $50,000 + 800 + 9 = $ ———

1 Solve.

a. 2×5 ___

b. 3×4 ___

c. $14 \div 2$ ___

d. $6 \div 3$ ___

e. 6×5 ___
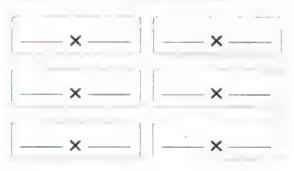
f. $20 \div 5$ ___

2 Write each factor pair and the factors of the number 18.

___ × ___   ___ × ___

___ × ___   ___ × ___

___ × ___   ___ × ___

• Factors are ___

3 Write the time.

___ : ___

4 Choose the correct answer.

a. ___ is a common multiple of 2 and 3.   (4 **or** 12 **or** 8 **or** 5)

b. $8 \times 0 =$ ___   (0 **or** 8 **or** 80 **or** 9)

c. ___ is a multiple of 5.   (23 **or** 14 **or** 56 **or** 15)

d. $2 \times$ ___ $= 12$ (10 **or** 8 **or** 14 **or** 6)

e. The minute hand will point to number ___
when 50 minutes have passed.   (5 **or** 10 **or** 8 **or** 4)
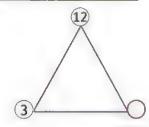
5 Ahmed bought 5 packs of ping pong balls. Each pack has 3 balls.

How many balls are there ?

___

___

Work area

6 Find the missing factor in the triangle. Then write the four sentences that show the fact family.

___   ___

___   ___

12

3

1 Put (✓) to the correct statement or (X) to the incorrect statement.

a. The three numbers 4, 8 and 2 can form a fact family.   (   )

b. $7 + 7 + 7 + 7 + 7 + 7 + 7 = 7 \times 8$ (   )

c. $3 \times 9 = 9 + 3$ (   )

d. $7 \div 7 = 7 \div 1$ (   )

e. $1 \text{ m} = 100 \text{ cm}$ (   )

f. 150 tens = 15 thousands   (   )

2 Choose the correct answer.

a. The minute hand will point to the number 4 when _____ minutes have passed.

(5 **or** 10 **or** 15 **or** 20)

b. 49 is a multiple of _____   (6 **or** 7 **or** 8 **or** 9)

c. $7 \times 6 =$ _____ $\times 7$ (1 **or** 5 **or** 6 **or** 7)

d. 5 rows of 7 = _____   (12 **or** 2 **or** 57 **or** 35)

e. $1 \text{ cm} =$ _____ mm   (1 **or** 10 **or** 100 **or** 1,000)

f. The length of the figure = _____ cm

(3 **or** 4 **or** 5 **or** 6)

3 Match.

a. 3×2 b. $25 \div 5$ c. $3 + 3 + 3 + 3$ d. $8 \div 8$ e. $2 \div 1$

2×6 $36 \div 6$ 1×5 2×1 $7 \div 7$

4 Complete.

a. $5 + 30,000 + 400 + 7,000 + 60 =$ _____

b. 2 groups of 9 = _____ + _____

c. The tally marks 卌 ||| mean _____

d. 1,000 , 1,100 , 1,200 , 1,300 , _____ (in the same pattern)

e. If $8 \times 9 = 72$, then _____ $\div 8 = 9$

f. $36 \div 4 = 3 \times$ _____

---

5 **Arrange the following numbers from least to greatest.**

99,007 , 91,500 , 9,999 , 91,005 , 9,009

The order is : _____ , _____ , _____ , _____ , _____

---

6 **Write the other facts from the family** $\boxed{15 \div 3 = 5}$

---
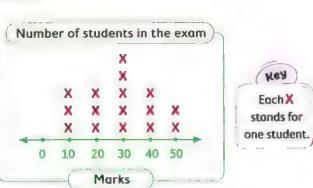
7 Ola bought 7 pens. If the price of the pens is 35 pounds.
Find the price of each pen.

The price of each pen = _____ = _____ pounds.

---
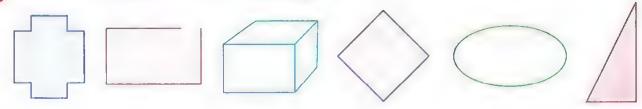
8 **Use the line plot to answer the questions.**

a. How many students have
40 marks ? _____ students.

b. How many students have more
than 30 marks ? _____ students.

c. How many students have this
exam ? _____ students.

Number of students in the exam

```
                    X
                    X
        X   X   X   X
        X   X   X   X   X
        X   X   X   X   X
    ←———————————————————→
    0  10  20  30  40  50
```

Key
Each X stands for one student.

Marks

1 Circle the shapes which are not polygons.

2 Join the equal answers.

a. 4×9 •   • 2×10

b. 0×7 •   • 2×4

c. 4×5 •   • 6×6

d. $24 \div 3$ •   • $30 \div 3$
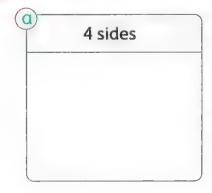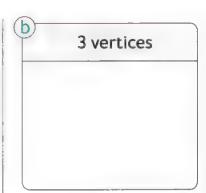
e. $20 \div 2$ •   • 1×0
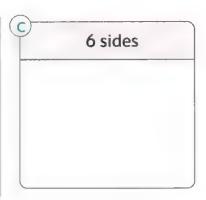
3 Complete.

a. The polygon which has 3 sides is called _____

b. The hexagon has _____ vertices.

c. The quadrilateral has _____ sides.

d. The _____ has 7 sides.

e. The pentagon has _____ sides and _____ vertices.

f. In any polygon, the number of _____ equals the number of _____

4 Draw a polygon with.

a
4 sides

b
3 vertices

c
6 sides
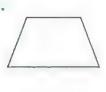
1 Write the name of each quadrilateral.

a.

b.

c.

d.

_____   _____   _____   _____
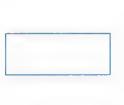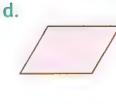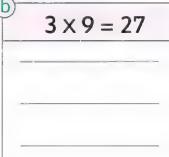
2 Complete.

a. The rectangle has _____ similar vertices.

b. The parallelogram has _____ pairs of parallel sides.

c. The square has _____ equal sides.

d. The trapezium has exactly _____ pair of parallel sides.

e. The rectangle has _____ pairs of equal sides.

f. The heptagon has _____ sides.

3 Write the other facts from each family.

a
$$2 \times 7 = 14$$
_____
_____
_____

b
$$3 \times 9 = 27$$
_____
_____
_____

c
$$18 \div 3 = 6$$
_____
_____
_____

4 Each monkey wants to eat 6 bananas.
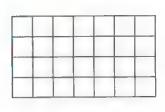
There are 30 bananas.
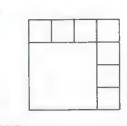
How many monkeys can be fed ?

_____

_____

_____

Work area
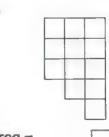
1 Complete to find the area of each of the following.

a.

Area = ——— × ——— = ——— ☐

b.

Area = ——— × ———

= ——— square units

c.
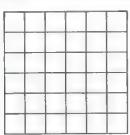
Area = ——— ☐
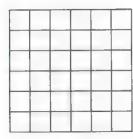
2 Use the grid to draw a rectangle represents each of the following sentences and calculate the area.

a.

5 × 3 = ⬭

b.

4 × 2 = ⬭

3 Complete.

a. ★★★★
★★★★   ——— rows of ———

b. 73,289 = ——— + ——— + ——— + ——— + ———

c. The number of sides of a triangle is ——— sides.
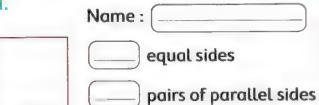
d. The least 5-digit number formed from 7 , 5 , 8 , 9 and 1 is ———
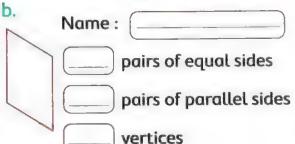
e. The rhombus has ——— vertices.

4 Name each figure and write the missing numbers.

a.

Name : (————————)

——— equal sides

——— pairs of parallel sides

——— vertices

b.

Name : (————————)

——— pairs of equal sides

——— pairs of parallel sides

——— vertices
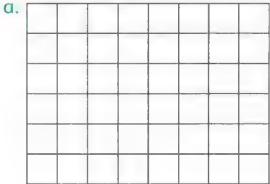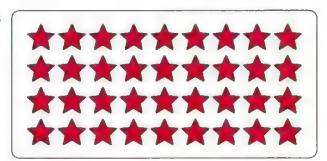
1 Split the following array using the distributive property.
Write the equations that match it.

a.

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} + \boxed{} = \bigcirc$

$6 \times 8 = \underline{}$

$6 \times 8 = (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

b.

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} \times \boxed{} = \boxed{}$

$\boxed{} + \boxed{} = \bigcirc$

$4 \times 9 = \underline{}$

$4 \times 9 = (\underline{} \times \underline{}) + (\underline{} \times \underline{})$

2 Use the distributive property to complete the following equations.

a. $7 \times 13 = (7 \times 5) + (7 \times \underline{})$
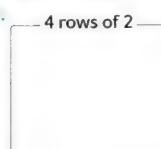
b. $8 \times 9 = (8 \times 4) + (\underline{} \times \underline{})$

c. $5 \times 11 = (5 \times 3) + (\underline{} \times \underline{})$

d. $3 \times 15 = (3 \times 10) + (\underline{} \times \underline{})$

e. $8 \times 12 = (8 \times \underline{}) + (8 \times 7)$

f. $7 \times 16 = (7 \times 10) + (\underline{} \times \underline{})$

g. $\underline{} \times \underline{} = (5 \times 9) + (5 \times 6)$

h. $\underline{} \times \underline{} = (3 \times 10) + (3 \times 3)$

i. $\underline{} \times \underline{} = (4 \times 7) + (4 \times 3)$

j. $\underline{} \times \underline{} = (6 \times 5) + (6 \times 7)$

3 Discover the pattern rule. Write the missing numbers.

a. 14 , 17 , 20 , 23 , _____ , _____

b. 30 , 28 , 26 , 24 , _____ , _____

Rule

[_____]

[_____]

4 Create an array.

a.
┌─── 4 rows of 2 ───┐
│   │
│   │
│   │
│   │
└───────────────────┘

b.
┌─── 7 columns of 3 ───┐
│   │
│   │
│   │
│   │
└──────────────────────┘

c.
┌─── 1 row of 5 ───┐
│   │
│   │
│   │
│   │
└──────────────────┘

5 Complete.

a. $2 \times 6 =$ _____

b. $4 \times 8 =$ _____

c. $6 \times 9 =$ _____

d. $5 \times 10 =$ _____

e. $2 \times 8 = 4 \times$ _____

f. $25 \div 5 =$ _____

g. $35 \div 7 =$ _____

h. $24 \div 6 =$ _____

i. The greatest number formed from the digits 5 , 7 , 4 and 2 is _____

j. The smallest 4-digits number formed from the digits 9, 5, 0 and 8 is _____

k. The pentagon is a polygon which has _____ sides.

l. The parallelogram has _____ pairs of parallel sides.

m. |||| |||| |||| represent _____

6 Write the time.

a. [clock] ___:___

b. [clock] ___:___

c. [clock] ___:___

d. [clock] ___:___

7 Write the numbers in order from least to greatest.

[745,216] , [390,571] , [735,429] , [391,897] , [79,999]

The order is : _____ , _____ , _____ , _____ , _____

Assessment Chapter 4

1 Choose.

a. Which of the following is not a polygon ?

    ◯ Square   ◯ Circle   ◯ Hexagon

b. How many sides does this shape have ?

    ◯ 5 sides   ◯ 7 sides   ◯ 6 sides

c. Which of the following does not represent a parallelogram ?

    ◯ Square   ◯ Trapezium   ◯ Rhombus

d. The area of the opposite figure is _____

    ◯ 6 ☐   ◯ 12 ☐   ◯ 9 ☐
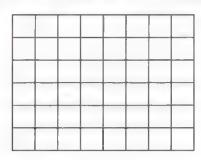
e. _____ $= (4 \times 4) + (4 \times 5)$
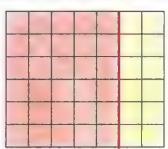
    ◯ 4×9 ◯ 4×6 ◯ 4×1

---

2 Calculate the area of the figure.

The area = ___ × ___

        = ___ square units

3 Write the distributive property equation. Calculate the total area.

$6 \times 7 = ($ ___ $\times$ ___ $) + ($ ___ $\times$ ___ $)$

        = ___ square units

---

4 Identify each 2D shape, and write the number of each of sides and vertices.

a.

Sides ☐

Vertices ☐

Name : _____

b.

Sides ☐

Vertices ☐

Name : _____
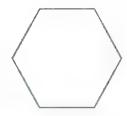
1 **Complete.**
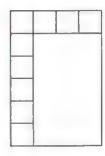
a. 321 , 432 , 543 , 654 , _____ , _____ (in the same pattern)

b. 50,000 + 500 + 3,000 + 30 + 8 = _____

c. 2 × 5 = _____

d. The pentagon is a polygon which has _____ vertices.

e. 3 m = _____ cm

f. _____ ÷ 3 = 5

g. 7 × 13 = 7 × 10 + 7 × _____

---

2 **Put (✓) to the correct statement or (✗) to the incorrect statement.**

a. 7 × 15 = (7 × 10) + (7 × 5) is called the distributive property of addition.   (   )

b. 3 × 7 = 7 × 3 is called the commutative property of multiplication.   (   )

c. 3 rows of 5 = 3 × 5 = 15   (   )

d. 5 × 1 = 5 ÷ 1   (   )

e. The rectangle's vertices are not similar.   (   )

f. 5 + 5 + 5 = 3 + 3 + 3 + 3 + 3   (   )

g. The area of the figure [figure] equals 8 ☐   (   )

---

3 **Calculate the area of each of the following.**
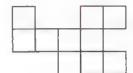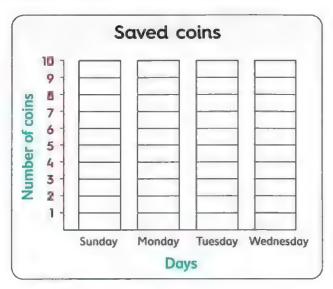
a.

Area = ___ × ___

= ___ square units

b.

Area = ___ × ___

= ___ square units

c.

Area = _____ ☐

4 Name each figure and write the missing numbers.

a.

Name [ ]

[ ] pairs of equal sides

[ ] pairs of parallel sides

[ ] vertices

b.

Name [الـهـعـاصـر]

[ ] equal sides

[ ] pair of parallel sides

[ ] vertices

---

5 Draw a model groups. Then write an addition sentence and multiplication sentence for | **2 groups of 3** |

---

6 Count the tallies. Write the total. Color the graph to show the data.
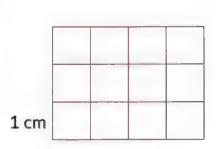
Saved coins		
Day	**Tally**	**Number**
Sunday	||||	____
Monday	₩|||| |	____
Tuesday	₩|||| ₩||||	____
Wednesday	₩||||	____

Saved coins

Number of coins

10
9
8
7
6
5
4
3
2
1

Sunday Monday Tuesday Wednesday

Days

1 Find the perimeter and the area of each of the following.

a.

1 cm

Perimeter = ——— cm

Area = ——— square centimeters

b.

1 cm

Perimeter = ——— cm

Area = ——— square centimeters

---

2 Measure each side and find the perimeter of each polygon.

a.

——— cm

——— cm   ——— cm

——— cm

Perimeter = ——— + ——— + ———

+ ——— = ——— cm

b.

——— cm

——— cm

——— cm

——— cm   ——— cm

——— cm

——— cm
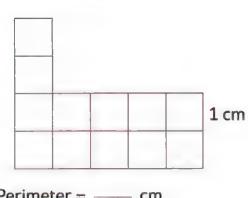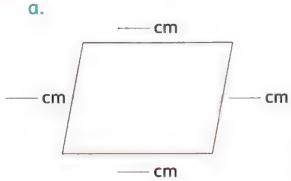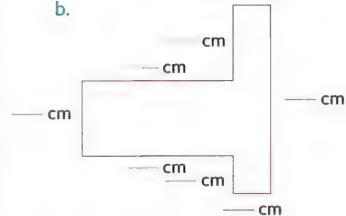
——— cm
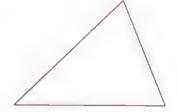
Perimeter = ——— + ——— + ——— + ———

+ ——— + ——— + ——— + ———

= ——— cm

---

3 Find the perimeter of the opposite triangle.

Perimeter = ——— + ——— + ——— = ——— cm

4 Choose the correct answer.

a. Which of the following does not represent a parallelogram ?

(square **or** trapezium **or** rhombus **or** rectangle)

b. What number will the minute hand point to when 5 minutes have passed ?

(1 **or** 5 **or** 4 **or** 11)

c. $3 \times 4 =$ _____   (2×2 **or** 2×6 **or** 3×5 **or** 12×0)

d. 70 mm = ———— cm   (7 **or** 70 **or** 700 **or** 7,000)

e. ———— is a multiple of 3.   (7 **or** 8 **or** 12 **or** 14)

f. ———— $= (6 \times 4) + (6 \times 3)$ (6×5 **or** 6×7 **or** 6×9 **or** 6×4)

g. ———— is a common multiple of 2 and 3.   (4 **or** 9 **or** 15 **or** 24)

h. $3 \times$ _____ $= 21$ (5 **or** 6 **or** 7 **or** 8)
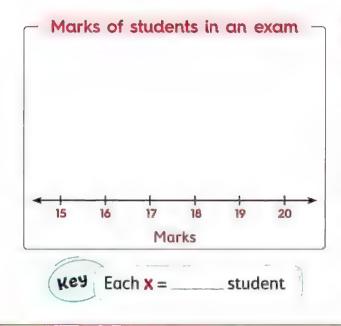
i. Three hundred five thousand, two hundred fifty-one = _____

(35,251 **or** 53,251 **or** 350,251 **or** 305,251)

---

5 Use the table to draw a line plots.

Marks of students in an exam

Marks

Key Each **X** = _____ student
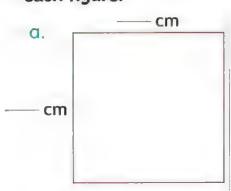
Marks of students in an exam	
Marks	Number of students
15	2
16	1
17	4
18	6
19	4
20	2

---

6 A T.V. show ended at 6:00. It lasted for 15 minutes.

What time did the T.V. show start ?   ——:——
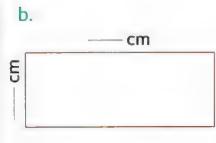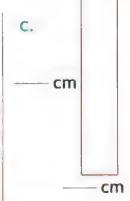
1 Use a centimeter ruler to measure the side lengths, then find the area of each figure.

a.
—— cm

—— cm

Area = —— × ——

= —— square

centimeters

b.
—— cm

cm

Area = —— × ——

= —— square

centimeters

c.
—— cm

—— cm

Area = —— × ——
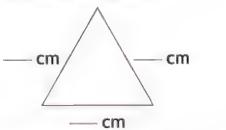
= —— square

centimeters

2 Calculate the perimeter of each polygon in centimeters, then write the name of each polygon.

a.
—— cm   —— cm

—— cm

- Perimeter = —— + —— + —— = —— cm

- Name : _____

b.
—— cm

—— cm   —— cm

—— cm

- Perimeter = —— + —— + —— + ——

= —— cm

- Name : _____

3 Discover the pattern rule. Write the missing numbers.

Rule

a. 20 , 24 , 28 , 32 , _____ , _____

b. 40 , 35 , 30 , 25 , _____ , _____
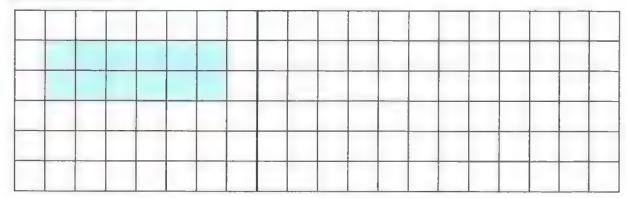
4 Sara eats 5 carrots every day.

How many carrots does she eat in a week ?
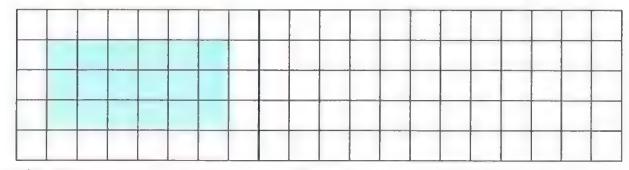
_____

1 Find the area and the perimeter of the drawn rectangle. Then draw another rectangle with the same area but a different perimeter in the grid and calculate it.

- Area = _____
- Perimeter = _____

- Area = _____
- Perimeter = _____

2 Find the area and the perimeter of the drawn rectangle. Then draw another rectangle with the same perimeter but a different area in the grid and calculate it.

- Area = _____
- Perimeter = _____

- Area = _____
- Perimeter = _____

3 Complete.

a. $9 \times 8 = (9 \times 5) + ($ _____ $\times$ _____ $)$

b. $753,920 = $ _____ $+$ _____ $+$ _____ $+$ _____ $+$ _____ (in expanded form)

c. $7 \times 6 = $ _____

d. $24 \div 3 = $ _____

e. $20 \text{ cm} = $ _____ mm

1 A notebook had a length of 15 cm and a width of 10 cm.
What is the perimeter of the notebook ?

_____

2 Ahmed wants to tile his bedroom.
If the floor is 5 meters long and 4 meters wide, how many one meter square tiles will he need?

_____

3 Sameh has 21 oranges and wants to put them equally in 3 plates.
How many oranges are there in each plate ?

_____

4 Find the results.

a. $5 \times 4 =$ ——
b. $3 \times 7 =$ ——
c. $6 \times 7 =$ ——
d. $4 \times 9 =$ ——
e. $35 \div 7 =$ ——
f. $16 \div 2 =$ ——

5 Arrange from the least to the greatest.

$$740,852 \quad , \quad 952,640 \quad , \quad 579,989 \quad , \quad 589,979$$

The order is : ———— , ———— , ———— , ————
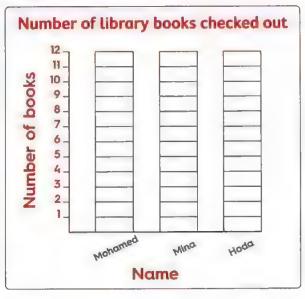
6 Use the tally table to complete the bar graph.

Number of library books checked out	
Name	Tally
Mohamed	卌 卌 l
Mina	卌 l
Hoda	卌 卌 ll

Number of library books checked out

a. How many books are checked out by Mohamed ? ———
b. How many books are checked out by Mina and Hoda ? ———

1 Solve the following problems using any strategy.

a. $5 \times 60 =$ ―――

b. $2 \times 30 =$ ―――

c. $4 \times 50 =$ ―――

d. $7 \times 20 =$ ―――

e. $8 \times 60 =$ ―――

f. $3 \times 90 =$ ―――

g. $50 \times 3 =$ ―――

h. $70 \times 6 =$ ―――

i. $40 \times 7 =$ ―――

j. $20 \times 9 =$ ―――

k. $30 \times 7 =$ ―――

l. $90 \times 5 =$ ―――

2 Complete.

a. $50,000 + 3,000 + 4 =$ ――――― (in standard form)

b. The place value of the digit 0 in the number 320,481 is ――――

c. The greatest number formed from 3 , 0 , 1 , 9 , 8 is ―――――

d. ――――― $\times 4 = 5 \times 8$

e. 20 , 24 , 28 , 32 , ――――― (in the same pattern)
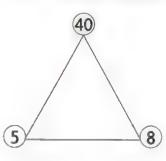
f. The area of the opposite figure = ―― $\times$ ―― = ―― $\square$

3 Write the fact family for the opposite numbers.

• ――――――――

• ――――――――

• ――――――――

• ――――――――

4 Put "> , = or <".

a. 75,562 ◯ 701,561

b. 7,200 tens ◯ 74 hundreds

c. 7×8 ◯ 5×9

d. $4 + 5$ ◯ 4×5

e. 7×0 ◯ 9×0

f. $20 \div 4$ ◯ $40 \div 8$

Assessment Chapter 5

1 Find the perimeter and the area of each of the following shapes.

a.

4 cm

2 cm

Perimeter = _____ cm

Area = _____ square centimeters

b.

5 cm

3 cm

Perimeter = _____ cm
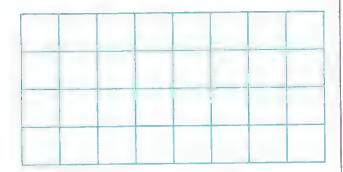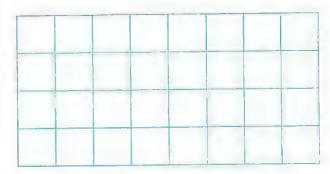
Area = _____ square centimeters
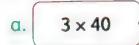
2 Draw a rectangle of perimeter 10 length units in the grid.

3 Draw a rectangle of area 8 square units in the grid.

4 Join the equal products.

a. 3×40 4×40

b. 9×20 6×10

c. 30×2 6×30

d. 2×80 60×2

5 Nada is sewing a border on a baby blanket. The length of the blanket is 40 cm and the width is 30 cm

How long will the border be ?

_____

_____

_____

1 Complete.

a. 30 thousands and 3 = _____

b. (◯ , ▭ , △ , ▭ , ◉ , ▢ , _____ , _____ (in the same pattern)

c. $27 \div 3 =$ _____

d. The hexagon is a polygon which has _____ sides.

e. The area of the shape ▭▭▭▭ equals _____ ▢

f. The perimeter of the rectangle [ ] 3 cm is _____ cm.

   7 cm

g. $7 \times 30 =$ _____

2 Choose the correct answer.

a. 15 thousands [ ] 51 hundreds.   (< or = or >)

b. 6×3 tens [ ] 9×2 tens.   (< or = or >)

c. 1 m = _____ cm   (1 or 10 or 100 or 1,000)

d. The area of a rectangle with 5 cm long and 2 cm wide equals _____

   square centimeters.   (7 or 14 or 10 or 100)

e. The value of the digit 6 in the number 26,345 is _____

                    (6 or 60 or 600 or 6,000)

3 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. A rectangle with 5 units wide and 10 units length has
   an area of 50 square units.   (   )

b. $70 + 300 + 5,000 + 10,000 = 15,370$ (   )

c. 4 rows of $5 = 4 + 4 + 4 + 4$ (   )

d. 49 is a multiple of 7   (   )

e. The two rectangles [ ] 3 cm and [ ] 2 cm have

   6 cm   7 cm
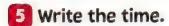
   the same area but different perimeter.   (   )

4 Sameh wants to make a wooden frame around the window of his room which is 3 m long and 1 m wide , **so what length of wood does he need for the frame ?**

_____

_____

5 Write the time.

a.

It is _____

:____
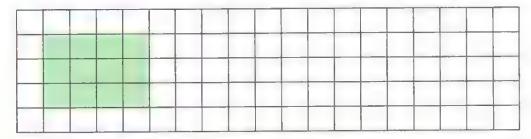
b.

It is _____

____:____
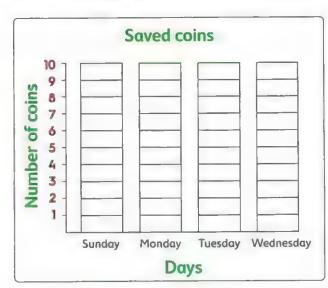
6 Draw a rectangle of the same perimeter of the drawn rectangle in the grid.

7 Count the tallies. Write the total. Color the graph to show the data.

Saved coins		
Day	**Tally**	**Number**
Sunday	|||	____
Monday	|||||	____
Tuesday	||||| |||||	____
Wednesday	||||| ||	____

Saved coins

Number of coins

10
9
8
7
6
5
4
3
2
1

Sunday   Monday   Tuesday   Wednesday

Days

1 Find the following products.

a. $5 \times 30 =$ —— 　　 b. $4 \times 200 =$ —— 　　 c. $6 \times 3,000 =$ ——

d. $5 \times 700 =$ —— 　　 e. $3 \times 400 =$ —— 　　 f. $4 \times 8,000 =$ ——
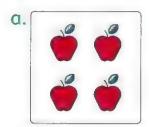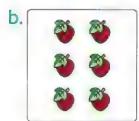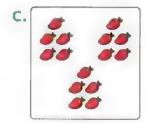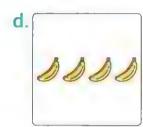
g. $2 \times 900 =$ —— 　　 h. $8 \times 900 =$ —— 　　 i. $7 \times 400 =$ ——

2 Write a multiplication sentence for each.

a.　　　　　　 b.　　　　　　 c.　　　　　　 d.

—————　　 —————　　 —————　　 —————
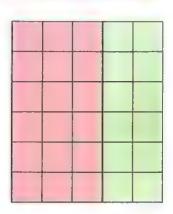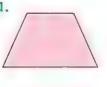
e. $2 + 2 + 2 + 2 = 8$ 　　　 f. $4 + 4 + 4 + 4 = 16$ 　　　 g. $9 + 9 + 9 = 27$

—————　　　　　 —————　　　　　 —————

3 Write the distributive property equation.
Calculate the total area.

$6 \times 5 =$ (—— $\times$ ——) + (—— $\times$ ——)

$=$ —— $+$ ——

$=$ —— square units
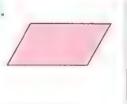
4 Write the name for each of the following.
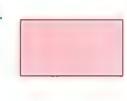
a.　　　　　 b.　　　　　 c.　　　　　 d.

———　　　　 ———　　　　 ———　　　　 ———

1 Complete.

a. $9 \times \underline{\hspace{1cm}} = 18$

b. $9 \times \underline{\hspace{1cm}} = 45$

c. $9 \times 6 = \underline{\hspace{1cm}}$

d. $9 \times 7 = \underline{\hspace{1cm}}$

e. $\underline{\hspace{1cm}} \times 9 = 36$

f. $9 \times \underline{\hspace{1cm}} = 0$

g. $9 \times 8 = \underline{\hspace{1cm}}$

h. $9 \times \underline{\hspace{1cm}} = 81$

i. $9 \times 10 = \underline{\hspace{1cm}}$

j. $8 \times 8 = \underline{\hspace{1cm}}$

k. $6 \times 7 = \underline{\hspace{1cm}}$

l. $\underline{\hspace{1cm}} \times 5 = 45$

m. $7 \times 7 = \underline{\hspace{1cm}}$

n. $\underline{\hspace{1cm}} \times 4 = 32$

o. $9 \times \underline{\hspace{1cm}} = 27$

2 Arrange from the greatest to the least.

170,072 , 52,791 , 203,415 , 204,111

The order is : $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$

3 Write the time.

a.

b.

c.
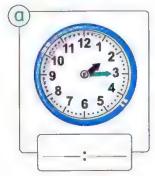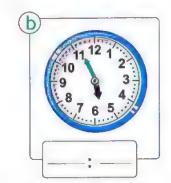
4 Circle the correct answer.

a.	b.	c.
200 mL 200 L	2 mL 2 L	350 mL 350 L

5 Mostafa is a farmer. His farm is 150 m long and 100 m wide. He wants to install a fence all around his farm.

What is the length of the fence ?

$\underline{\hspace{12cm}}$

1 Complete.

a. $3 \times \underline{\hspace{1cm}} = 5 \times 3$

b. $6 \times 4 = \underline{\hspace{1cm}}$

c. $8 \times \underline{\hspace{1cm}} = 0$

d. $5 \times 9 = (5 \times \underline{\hspace{1cm}}) + (5 \times 6)$

e. $7 \times \underline{\hspace{1cm}} = 7$

f. $9 \times 9 = \underline{\hspace{1cm}}$

g. $0 + 10 = \underline{\hspace{1cm}}$

h. $1 \times 9 = \underline{\hspace{1cm}}$

i. $3 \times 2 = \underline{\hspace{1cm}} \times 3$

j. $10 \times 0 = \underline{\hspace{1cm}}$

k. $\underline{\hspace{1cm}} \times 5 = 5$

l. $9 + 1 = \underline{\hspace{1cm}}$

m. $7 \times \underline{\hspace{1cm}} = (7 \times 2) + (7 \times 3)$

n. $3 + 3 = \underline{\hspace{1cm}} \times 3$

o. $17 + \underline{\hspace{1cm}} = 17$

---
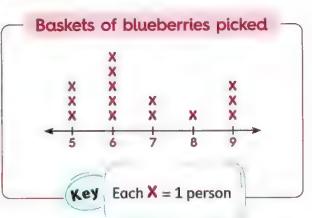
2 Use the baskets of blueberries picked line plot.

a. How many people picked 9 baskets of blueberries ? _____

b. How many people picked fewer than 7 baskets of blueberries ? _____

c. How many people picked more than 6 baskets of blueberries ? _____

Baskets of blueberries picked

Key Each **X** = 1 person

---

3 Look at each array. Complete.

a.

_____ equal rows

_____ in each row

_____ in all

b.

_____ equal rows

_____ in each row

_____ in all

---

4 Arrange from the least to the greatest.

178,000 , 432,823 , 97,988 , 201,003

The order is : _____ , _____ , _____ , _____

1 Choose the correct answer.

a. The value of the digit 5 in the number 351,861 is _____

(500   **or**   5,000   **or**   50,000   **or**   500,000)

b. 94,782 > _____   (111,111   **or**   201,500   **or**   79,999   **or**   100,000)

c. 5,000 + 700,000 + 30 = _____

(573,000   **or**   705,030   **or**   750,300   **or**   570,300)

d. The place value of the digit 8 in the number 841,921 is _____

(Hundreds   **or**   Thousands   **or**   Ten thousands   **or**   Hundred thousands)

e. $9 \times 0 =$ _____ $(7 + 0$ **or** 8×1 **or** 1×9 **or** $0 \times 10)$

f. 74,215 > _____   (74,225   **or**   74,316   **or**   74,005   **or**   75,000)

g. 80,000 + 7,000 + 123 ☐ 7,000 + 800,000 + 123   (<   **or**   =   **or**   >)

h. 1 hundred thousand = _____ ten thousands

(1   **or**   10   **or**   100   **or**   1,000)

---

2 Complete.

a. _____ $\times 9 = 18$

b. $9 \times$ _____ $= 63$

c. _____ $\times 9 = 54$

d. _____ $\times 2 = 14$

e. $8 \times$ _____ $= 24$

f. $5 \times$ _____ $= 10$

g. $5 \times 9 =$ _____

h. $2 \times 7 =$ _____

i. $7 \times 8 =$ _____

j. $30 \div 6 =$ _____

k. $6 \times 700 =$ _____

l. $9 \times 8 =$ _____

---

3 Complete the table.

Shape	Name	Number of sides	Number of vertices
a. ▭	_____	_____	_____
b. ⬡	_____	_____	_____
c. △	_____	_____	_____

1 Solve the following addition problems using two different strategies.
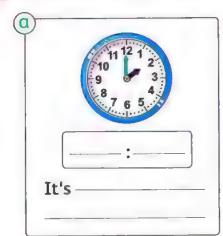
Problem	First strategy	Second strategy
a. 728 + 189		
b. 543 + 58		
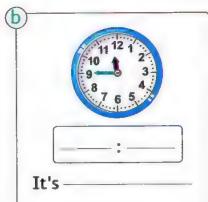
2 Solve the following problems.
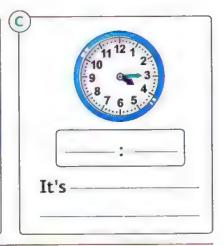
a. 217 + 98 + 148

= _____

= _____

b. (125 + 41) + (59 + 235)

= _____

= _____

3 Write the time in two ways.

a

____ : ____

It's _____

_____

b

____ : ____

It's _____

_____

c

____ : ____

It's _____

_____

4 Tick (✓) to the suitable unit to measure each object.

a.

mm ☐   m ☐

b.

mm ☐   m ☐

1 Solve the following subtraction problems using two different strategies.

Problem	First strategy	Second strategy
a. 562 − 279		
b. 380 − 74		

2 Put ">, < or =".

a. 702,432 ◯ Seven hundred two thousand, three hundred thirty-two

b. 7×4 ◯ 5×3

c. 70 thousands ◯ 700 hundreds

d. $7 + 0$ ◯ 8×0

e. $40 \div 5$ ◯ $56 \div 8$

f. $734 + 266$ ◯ $734 - 266$

g. $7 + 7 + 7 + 7 + 7$ ◯ 7×7

h. $9 + 1$ ◯ 9×1

i. 6×30 ◯ 60×3

j. 20×5 ◯ 10 tens

k. 8×4 ◯ $8 \div 4$

3 Complete.

a. $9 \times 400 =$ ———

b. $8 \times 7,000 =$ ———

c. $4 \times 8 =$ ———

d. $4 \times 5,000 =$

e. $9 \times 9 =$ ———

f. $7 \times 8 =$ ———

g. $3 , 13 , 23 , 33 ,$ ——— , ——— (in the same pattern)

4 Judy wants to tile the kitchen floor.
If the floor is 3 meters long and 2 meters wide.
How many one meter square tiles will she need ?
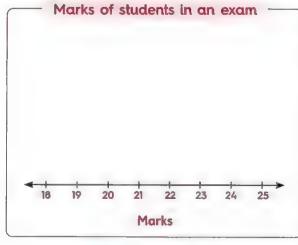
1 Jana had 435 trading cards. She gave away 118 cards.
How many cards does she have left ?

_____

_____

2 A Boeing 747 airplane has 416 seats. A Boeing 767 airplane has 245 seats.
What is the greatest number of passengers the two airplanes can carry altogether ?

_____

_____

3 Wael had 6,000 pounds. He bought a new mobile for 3,250 pounds and a speaker for 675 pounds. **How much money does have left with him ?**

_____

_____

4 **Find the results using any strategy.**

a. $721 + 182 =$ _____

b. $54 + 891 =$ _____

c. $1,330 - 1,270 =$ _____

d. $1,435 + 2,394 =$ _____

e. $855 - 105 =$ _____

f. $98 + 312 + 175 =$ _____

5 **Complete the table, then draw a line plot.**

Marks of students in an exam

Marks

Marks of students in an exam

Marks	Tally	Number of students
18	||	_____
19	||||	_____
20	⊬⊬ |	_____
21	⊬⊬ |||	_____
22	⊬⊬	_____
23	|||	_____
24	|	_____
25	|	_____

Key Each **X** = 1 student

1 Choose the correct answer.

a. 11 L = _____ mL   (110   **or**   1,100   **or**   11,000   **or**   110,000)

b. 7 cm = _____ mm   (7   **or**   70   **or**   700   **or**   7,000)

c. _____ × 9 = 36   (4   **or**   5   **or**   6   **or**   7)

d. 7 × 8 = _____   (54   **or**   49   **or**   56   **or**   64)
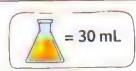
e. The capacity of a perfume bottle is measured by _____   (mL   **or**   L)

f. 3 × 700 = _____   (210   **or**   2,100   **or**   2,400   **or**   1,400)

g. _____ L = 7,000 mL   (7   **or**   70   **or**   700   **or**   7,000)
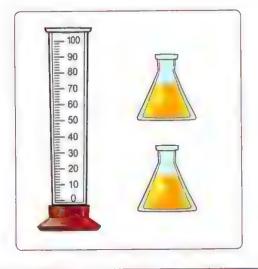
h. 600 + 7,000 + 10,000 = _____   (671   **or**   176   **or**   1,760   **or**   17,600)

---
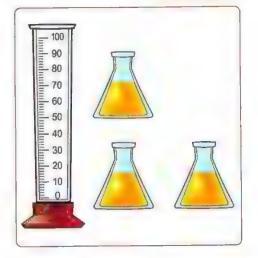
2 Color to reach the required measures.

 = 30 mL
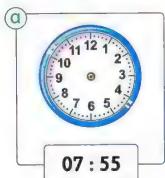
a.
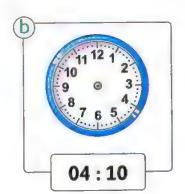
b.

---

3 Draw the clock hands.

a

07 : 55

b

04 : 10

Assessment Chapter 6

1 Choose the correct answer.

a. _____ − 269 = 372
- ◯ 103
- ◯ 641
- ◯ 475
- ◯ 117
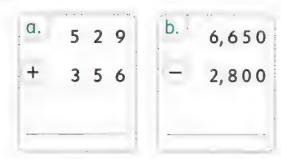
b. 20 thousands = _____ tens.
- ◯ 20
- ◯ 2,000
- ◯ 200
- ◯ 20,000

c. 3 × 7,000 = _____
- ◯ 2,100
- ◯ 210
- ◯ 21,000
- ◯ 21

d. The value of the digit 4 in the number 542,098 is _____
- ◯ 400,000
- ◯ 4,000
- ◯ 40,000
- ◯ 400

e. 806,257 < _____
- ◯ 752,608
- ◯ 806,258
- ◯ 806,255
- ◯ 257,808

f. 8 × _____ = (8 × 5) + (8 × 2)
- ◯ 10
- ◯ 8
- ◯ 3
- ◯ 7

2 Find the result.

a.
```
    5 2 9
  +   3 5 6
  _____
```

b.
```
    6,6 5 0
  −   2,8 0 0
  _____
```

c. 3,298 + 967 = _____

d. 7,000 − 3,251 = _____

3 Color to reach the required measure.

Key : = 30 ml

100
90
80
70
60
50
40
30
20
10
0

4 Complete.

a. 9 × 7 = _____

c. 20 × 6 = _____

e. 5,000 mL = _____ L

b. 5 × 30 = (5 × _____) × 10

d. 7 L = _____ mL

f. _____ × 9 = 36

5

Sama's family saved 7,000 L.E. to buy a new TV and a speaker. If the TV costs 4,500 L.E. and the speaker costs 375 L.E.

How much money were left with Sama's family ?

1 Put (✓) to the correct statement or (X) to the incorrect statement.

a. 3 cm = 300 mm   (   )

b. The square's vertices are similar.   (   )

c. 12 is a multiple of 3   (   )

d. 3 rows of 4 = 3 + 3 + 3   (   )

e. 2,345 = 5 + 400 + 30 + 2,000   (   )

f. The tally marks ||||| ||||| | represent 11   (   )

2 Complete.

a. 1 ② △3 , 2 ③ △4 , 3 ④ △5 , _____ , _____ (in the same pattern).

b. The pentagon is a polygon which has _____ vertices.

c. The area of the shape [+] equals _____ - ☐

d. The place value of the digit 6 in the number 3,645 is _____

e. The minute hand will point to the number 5 when _____ minutes have passed.

f. 9 × 17 = (9 × 10) + (9 × _____)

3 Use any strategy to find.

a. 324 + 135 = _____   b. 765 − 341 = _____

c.
```
    2,756
+   3,857
_____
```

d.
```
    9,000
−   4,567
_____
```

4 Mai saved 540 pounds in one year. The next year she saved 475 pounds.

What is the total amount she saved ?

5 Choose the correct answer.

a. 200 cm + 500 cm = _____ m   (2 or 3 or 5 or 7)

b. $7 \times 9 = 9 \times$ _____   (7 or 8 or 5 or 2)

c. 210 hundreds = _____ thousands   (210 or 2,100 or 2,1000 or 21)

d. 5×2 tens ◯ 10 tens   (< or = or >)

e. 7,000 milliliters = _____ liters   (7 or 70 or 700 or 7,000)

f. The perimeter of the rectangle ⬜ 4 cm is _____ cm

   6 cm   (4 or 6 or 10 or 20)

---
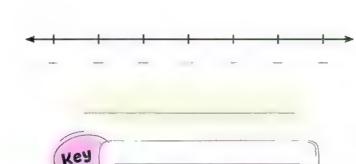
6 Match.
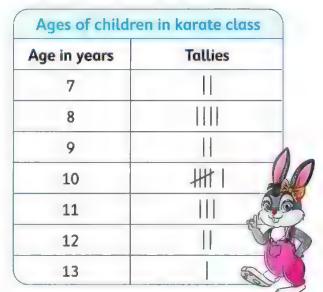
a. [5,621 + 1,798]   b. [279 + 95]   c. [521 − 186]   d. [2,030 − 1,521]

[374]   [509]   [7,419]   [335]

---

7 Use the table to draw a line plot.
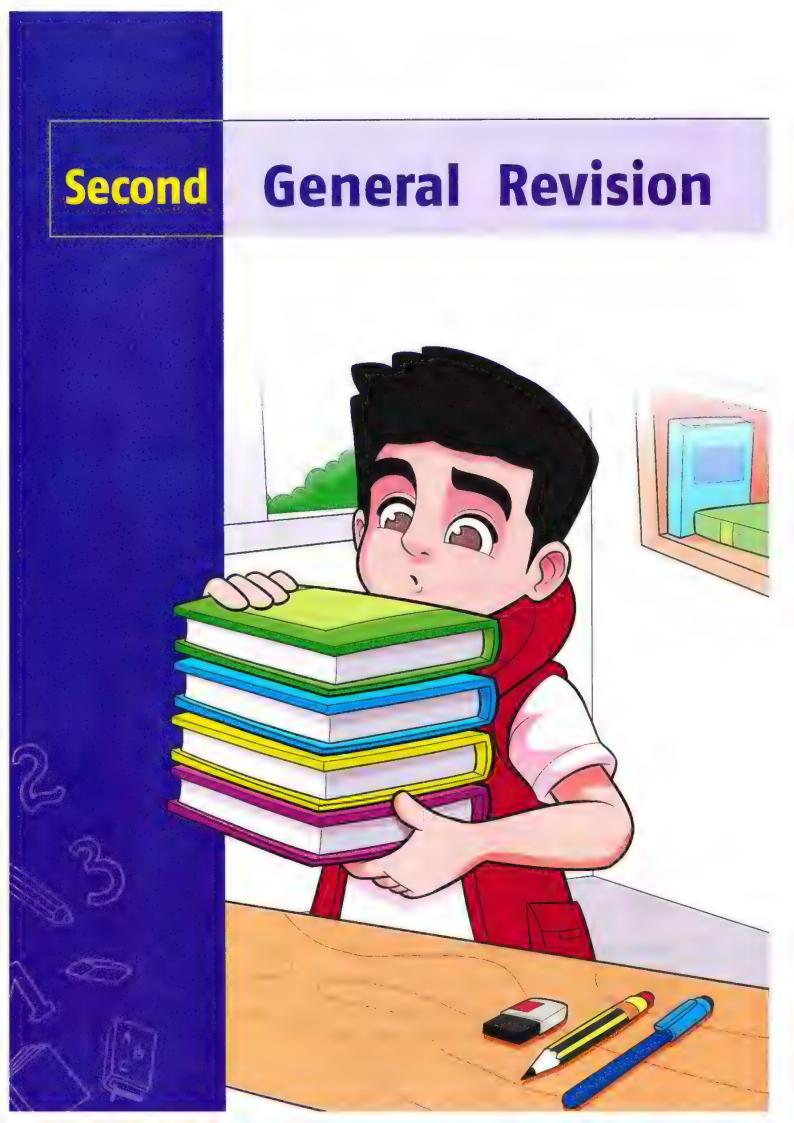
[Ages of children in karate class]

Ages of children in karate class	
Age in years	Tallies
7	||
8	||||
9	||
10	Ⱨ |
11	|||
12	||
13	|

Key [_____]

Use the line plot to answer the questions :

a. How many children in the class are 11 years ? _____ children

b. What age is the greatest number of children ? _____ years old

c. How many children are in karate class in all ? _____ children

Second

General Revision

General Revision
on Chapter 1

1 Complete.

a. 200 cm = ———— m

b. 3 cm + 2 cm = ———— mm

c. 97, 87, 77, 67, ————, ———— (in the same pattern)

d. ————, ———— (in the same pattern)

e. 110, 113, 116, 119, ————, ———— (in the same pattern)

f. 10, 14, 18, 22, ————, ———— (in the same pattern)

g. 5 , 10 , 15 , 20 , 25 , 30 , ————, ————, ———— (in the same pattern)

---

2 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. The length of your book is about 2 m. ( )

b. 4 cm = 14 mm. ( )

c. |||| ||| represent 8. ( )

d. 5 m = 500 cm. ( )

e. 123, 234, 345, 456, 576. are all in a correct same pattern. ( )

f. 70 mm > 70 cm. ( )

g. The length of the object ⊂⊃ equals 2 cm. ( )

---

3 Tick (✓) to the suitable unit to measure each object.

a.

b.

c.

d.

mm◯ m◯   mm◯ m◯   mm◯ m◯   mm◯ m◯
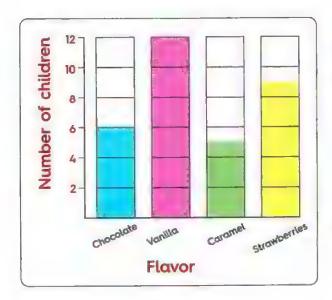
4 Use the following bar graph to complete the tally table, then answer the following questions.

Favorite ice cream flavor

Flavor	Tally
Chocolate	
Vanilla	
Caramel	
Strawberries	

Choose the correct answer.
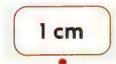
a. There are _____ children make this survey.   (20 **or** 30 **or** 32 **or** 50)

b. There are _____ children prefer vanilla ice cream flavor.

(6 **or** 12 **or** 5 **or** 9)

c. There are 9 children prefer _____ ice cream flavor.

(chocolate **or** vanilla **or** caramel **or** strawberries)

d. The smallest number of children prefer _____ ice cream flavor.

(chocolate **or** vanilla **or** caramel **or** strawberries)

5 Match.

a.
| 1 cm |

b.
| 1 m |

c.
| 100 mm |
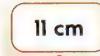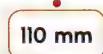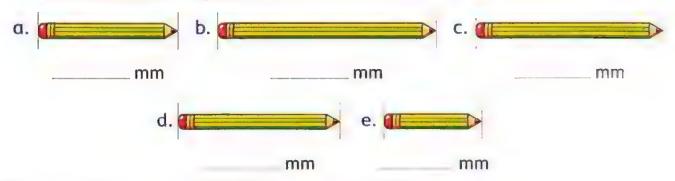
d.
| 11 cm |

| 10 cm |

| 10 mm |

| 110 mm |

| 100 cm |
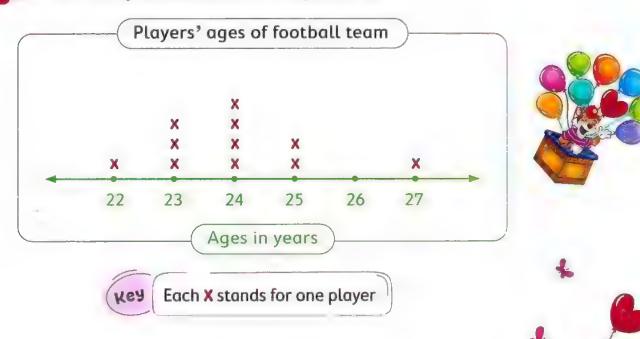
6 Measure the length of each pencil. Arrange the lengths from the shortest to the longest.

a. _____ mm b. _____ mm c. _____ mm

d. _____ mm e. _____ mm

The order is : _____ , _____ , _____ , _____ ,

---

7 Use the line plot to answer the questions.

Players' ages of football team

Ages in years

Key Each **X** stands for one player

a. How many players are 25 years old ? _____

b. Which age has the greatest number of players ? _____

c. How many players are younger than 24 years old ?

d. How many players are in the football team ? _____

8 This is a survey about our favorite fruit in the class.

Mango	Peach	Apple	Mango	Mango	Banana	Peach	Mango
Banana	Mango	Apple	Peach	Mango	Peach	Apple	Banana
Peach	Apple	Banana	Mango	Banana	Peach	Mango	Peach

Complete the tally table and then use it to make the bar graph.

Favorite fruit

Fruit	Tally	Number
Banana		
Peach		
Apple		
Mango		

Favorite fruit

Number of pupils

10
9
8
7
6
5
4
3
2
1

Banana   Peach   Apple   Mango

Fruit

General Revision
on Chapter 2

1 Complete.

a. $500 + 40 + 1,000 + 9 = $ —————

b. $51, 484 = $ ————— $+$ ————— $+$ ————— $+$ ————— $+$ —————

c. Two thousand, seven hundred five = ————— (in standard form)

d. The place value of the digit 7 in the number 371, 265 is —————

e. The value of the digit 0 in the number 960, 341 is —————

f. ————— $\times 7 = 7 + 7 + 7 = $ —————

---

2 Choose the correct answer.

a. Sixty thousand, two hundred sixty in standard form = —————

(60,216 **or** 60,260 **or** 602,006 **or** 16,260)

b. $90 + 30,000 + 4,000 + 800 = $ ————— (in standard form)

(9,348 **or** 34,980 **or** 34,809 **or** 34,890)

c. The value of the digit 4 in the number 674,213 is —————

(Thousands **or** 40,000 **or** 4,000 **or** Ten thousands)

d. The place value of the digit 2 in the number 246,107 is —————.

(Thousands **or** Ten thousands **or** Hundred thousands **or** Hundreds)

e. 3 equal groups of $5 = $ —————

($3 + 3 + 3$ **or** $5 + 5 + 5$ **or** $15 + 15 + 15$ **or** 35)

---
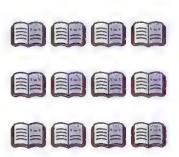
3 Put (✓) to the correct statement or (✗) to the incorrect statement.

a. $20,000 + 7,000 + 400 + 10 + 1 = 27,411$ ( )
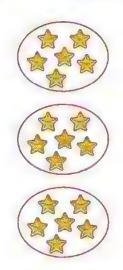
b. $7,068 = 7,000 + 600 + 8$ ( )

c. The value of the circled digit in the number 1②,349 is Thousands. ( )

d. The place value of the digit 8 in the number 85,163 is 80,000 ( )

e. The smallest number formed from 5 digits is 11,111 ( )

4 Write the multiplication sentence for the array. Then draw the array that shows the commutative property.

5 Write the multiplication sentence for the equal groups. Then draw the equal groups that show the commutative property.

6 Compare using "> , = or <".

a. 3,467 ◯ 3,164

b. 300 thousands ◯ 3,000 hundreds

c. 132,045 ◯ 93,245

d. 548,176 ◯ 548,173

e. One hundred thousand ◯ 99,999

f. 275 thousands and 6 ◯ 275,600

g. 25,600 tens ◯ 256 thousands

h. 381,205 ◯ 83 thousands and 205

7 Rearrange the digits 4, 5, 0, 9 to get the greatest and the smallest number.

• The greatest number is _____

• The smallest number is _____

8 Complete.

a.

Array	Model	Addition sentence	Multiplication sentence
	_____ rows of _____	_____	_____
	_____ rows of _____	_____	_____

b.

Equal groups	Model	Addition sentence	Multiplication sentence
	_____ groups of _____	_____	_____
	_____ groups of _____	_____	_____

9 Write the numbers in order from greatest to least.

a. 83,987   8,315   833,400   833,312

The order is : _____ , _____ , _____ , _____

b. 69,270   499,145   9,325   9,654

The order is : _____ , _____ , _____ , _____

10 Write the numbers in order from least to greatest.

a. 7,482   54,658   954,201   12,158

The order is : _____ , _____ , _____ , _____

b. 805,325   67,512   9,807   28,009

The order is : _____ , _____ , _____ , _____

General Revision
on Chapter 3

1 Find each result.

a. 9×3 ☐

b. $10 \div 2$ ☐

c. $15 \div 5$ ☐

d. 2×4 ☐

e. $8 \div 1$ ☐

f. 0×3 ☐

g. 8×3 ☐

h. 5×5 ☐

i. $8 \div 2$ ☐

j. $18 \div 2$ ☐

k. $32 \div 4$ ☐

l. $40 \div 5$ ☐

m. $14 \div 2$ ☐

n. 9×7 ☐

o. 4×5 ☐

p. 7×6 ☐

q. 3×5 ☐

r. $18 \div 3$ ☐

s. 10×9 ☐

t. 8×9 ☐

u. 1×6 ☐

2 Put "> , = or <".

a. 4×2 ◯ 1×10

b. 4×7 ◯ 5×6

c. 3×9 ◯ 5×5

d. $2 + 2$ ◯ 2×2

e. 2×9 ◯ $6 + 6 + 6$

f. 4×0 ◯ $4 + 0$

g. 10×4 ◯ 3×7
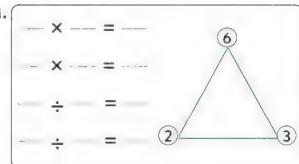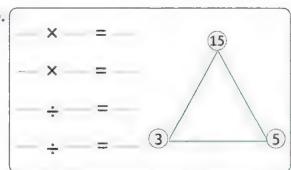
h. $5 + 1$ ◯ 5×1

3 Write the fact family for each set of numbers.

a.
___ × ___ = ___
___ × ___ = ___
___ ÷ ___ = ___
___ ÷ ___ = ___

6

2   3

b.
___ × ___ = ___
___ × ___ = ___
___ ÷ ___ = ___
___ ÷ ___ = ___

15

3   5

4 Join the equal answers.

a. 2 × 6

b. 3 × 8

c. 4 × 9

d. 3 × 3

e. 5 + 3

30 + 6

3 × 4

2 × 4

4 × 6

1 × 9

5 Write each factor pair and the factors of the number 12

12 = | ___ × ___ | | ___ × ___ |

= | ___ × ___ | | ___ × ___ |

= | ___ × ___ | | ___ × ___ |

• Factors are : _____

6 Write the time.

a

b
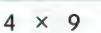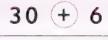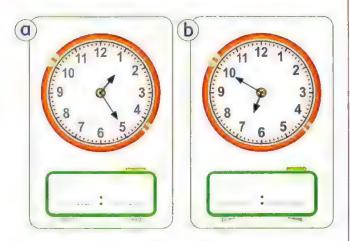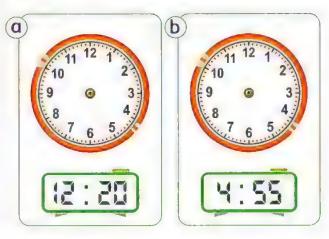
7 Draw the clock hands.

a

`12:20`

b

`4:55`

8 Draw the hands on the clock to show the time.

A TV show starts at 9 O'clock. It lasts for 55 minutes.

What time does the TV show finish ?

9 Our Arabic lesson started at 11 : 00 It finished at

For how long did Arabic lesson take ?

Arabic lesson took _____ minutes.

10 Use the 120 chart. Circle the multiples of 2.

14   9   23   8   10   17   20

11 Use the 120 chart. Underline the common multiples of 5 and 10.

15   60   35   80   50   100   10

12 Use the counters to make an array. Solve.

• How many groups of (6) are in (12) ?
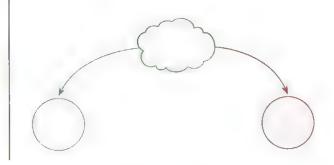
There are _____ groups of 6 in 12.

13 Use the 120 chart. Write the multiples of 3 up to 20.

_____

14 Use the 120 chart. Write the multiples of 5 between 11 and 44.

_____

15 Draw to show equal groups.
Fill in the part – part – whole model. Complete.

• **8** crayons divided among **2** boxes.

Each box has _____ crayons.

16 Read and solve. You can use any
strategy to solve.

Work area

a. Sandy planted **5** seeds in each flower pot.
   She had **7** pots.

   How many seeds did she plant ?

   _____

   _____
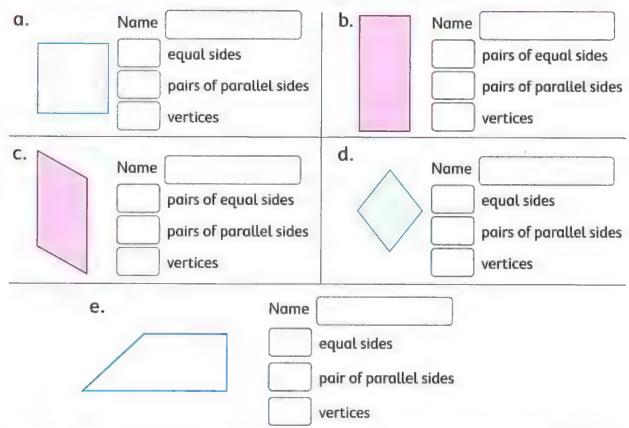
b. A guitar has **6** strings.
   How many strings are there in **10** guitars ?

   _____

General Revision
on Chapter 4

1 Name each figure and write the missing numbers.
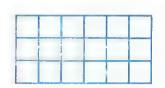
a.
Name [＿＿＿]
[＿] equal sides
[＿] pairs of parallel sides
[＿] vertices

b.
Name [＿＿＿]
[＿] pairs of equal sides
[＿] pairs of parallel sides
[＿] vertices

c.
Name [＿＿＿]
[＿] pairs of equal sides
[＿] pairs of parallel sides
[＿] vertices

d.
Name [＿＿＿]
[＿] equal sides
[＿] pairs of parallel sides
[＿] vertices

e.
Name [＿＿＿]
[＿] equal sides
[＿] pair of parallel sides
[＿] vertices

2 Calculate the area of each of the following.

a.
Area = ＿ × ＿
= ＿ square units

b.
Area = ＿ × ＿
= ＿ square units

c.
Area = ＿ × ＿
= ＿ square units

d.
Area = ＿ × ＿
= ＿ square units
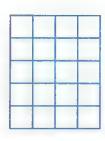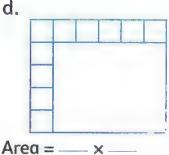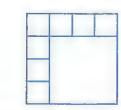
e.
Area = ＿ × ＿
= ＿ square units

f.
Area = ＿ × ＿
= ＿ square units

3 **Choose the correct answer.**

a. Which of the following does not represent a parallelogram ?

(square **or** trapezium **or** rhombus **or** rectangle)

b. The hexagon has _____ sides. (4 **or** 5 **or** 6 **or** 7)

c. The _____ has 5 vertices.

(triangle **or** pentagon **or** octagon **or** hexagon)

d. The trapezium has exactly _____ pair of parallel sides.

(1 **or** 2 **or** 3 **or** 4)

e. The rhombus has _____ equal sides. (1 **or** 2 **or** 3 **or** 4)

f. The area of the figure [figure] equals _____ ☐ (6 **or** 7 **or** 8 **or** 9)

---

4 **Complete**

a. The two straight lines ⫽ are _____

b. $9 \times 13 = (9 \times 10) + (9 \times \underline{\qquad})$

c. $(5 \times 8) + (5 \times 7) = 5 \times \underline{\qquad}$

d. The quadrilateral is a polygon which has _____ vertices.

e. The parallelogram is a quadrilateral which has _____ pairs of equal sides.

f. The polygon which has 8 vertices is called _____

---

5 **Put (✓) to the correct statement or (✗) to the incorrect statement.**

a. The circle is not a polygon. ( )

b. The square, rhombus and rectangle are parallelograms. ( )

c. The area of the rectangle [figure] equals 14 ☐. ( )

d. The hexagon has 5 sides. ( )

e. The two figures [figure] and [figure] are equal in area. ( )

f. $7 \times 16 = (7 \times 10) + (7 \times 6)$. ( )
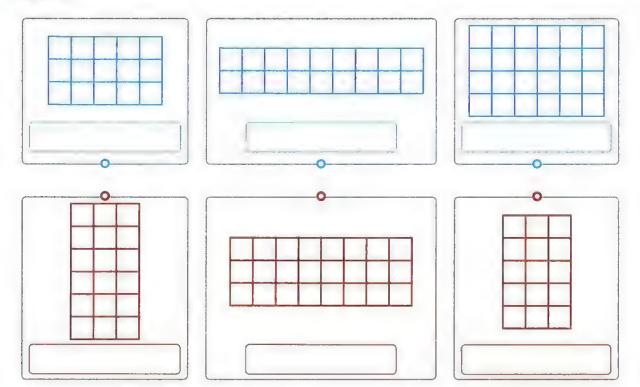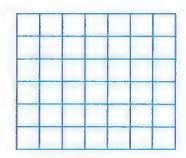
6 Write the multiplication sentence. Calculate the area. Match the equal areas.
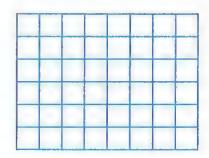
7 Split the following arrays using the distributive property. Calculate the total area of each.

a.

☐ × ☐ = ☐

☐ × ☐ = ☐

☐ + ☐ = ◯

$6 \times 7 = $ ◯

$6 \times 7 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$

b.

☐ × ☐ = ☐

☐ × ☐ = ☐

☐ + ☐ = ◯

$6 \times 8 = $ ◯

$6 \times 8 = (\underline{\quad} \times \underline{\quad}) + (\underline{\quad} \times \underline{\quad})$
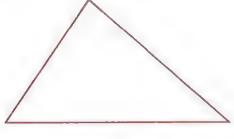
General Revision
on Chapter 5
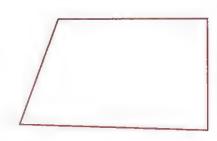
1 Using your ruler, measure each side length. Then find the perimeter of the figure.

a.

Perimeter = ____ + ____ + ____

= ____ cm

b.

Perimeter = ── + ── + ── + ──

= ── cm

---
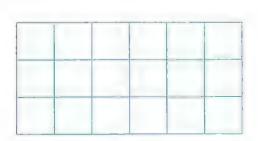
2 Calculate the perimeter and the area of each of the following figures.
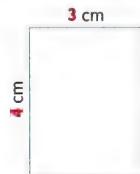
a.

Perimeter = ____ units

Area = ____ square units
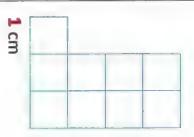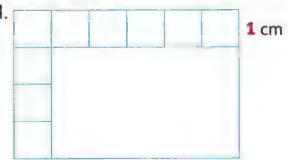
b.

3 cm

4 cm

Perimeter = ____ cm

Area = ____ square centimeters

c.

1 cm

Perimeter = ____ cm

Area = ____ square centimeters

d.

1 cm

Perimeter = ____ cm

Area = ____ square centimeters

3 Draw a rectangle of the same area of the drawn rectangle in the grid.
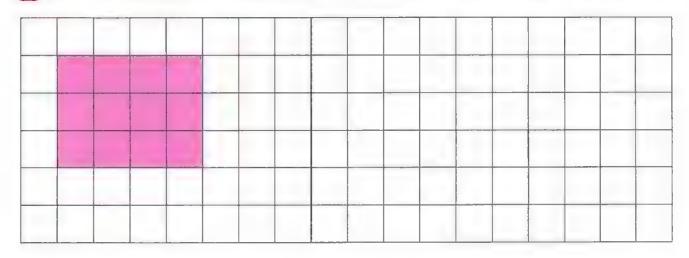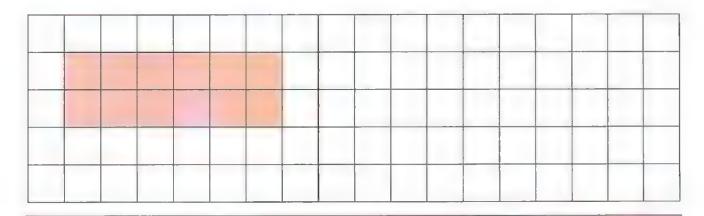
4 Draw a rectangle of the same perimeter of the drawn rectangle in the grid.

5 Maher wants to make a wooden frame around the window of his room which is 2 m long and 1 m wide,
so what length of wood does Maher need for the frame ?

6 A room wall is 5 meters long and 3 meters wide to be pasted with wallpaper.
Calculate the number of the square meters to cover the wall.

_____

_____

7 Find the product.

a. $4 \times 20 =$ ⬚

b. $9 \times 50 =$ ⬚

c. $8 \times 30 =$ ⬚

d. $3 \times 90 =$ ⬚

e. $60 \times 3 =$ ⬚

f. $7 \times 40 =$ ⬚

g. $50 \times 7 =$ ⬚

h. $30 \times 5 =$ ⬚

i. $20 \times 9 =$ ⬚

j. $70 \times 6 =$ ⬚

8 Complete the following.

a. 9×50

= (—— × ——) × 10 = —— × —— = ——

b. 4×3 tens = ⬚ tens

$4 \times 30 =$ ⬚

c. 5×60

= (—— × ——) × 10 = —— × —— = ——

d. 2×7 tens = ⬚ tens

$2 \times 70 =$ ⬚

e. 3×20

= (—— × ——) × 10 = —— × —— = ——

f. 5×7 tens = ⬚ tens

$5 \times 70 =$ ⬚

g. 9×20

= (—— × ——) × 10 = —— × —— = ——

h. 9×3 tens = ⬚ tens

$9 \times 30 =$ ⬚

1 Find each product of the following.

a. 4 × 10 = ——

b. 2 × 6 = ——

c. 60 × 3 = ——

d. 1 × 3,000 = ——

e. 9 × 9 = ——

f. 0 × 4 = ——

g. 7 × 50 = ——

h. 8 × 0 = ——

i. 9 × 600 = ——

j. 8 × 4 = ——

k. 6 × 1 = ——

l. 2 × 700 = ——

m. 9 × 8 = ——

n. 7,000 × 3 = ——

o. 9 × 2,000 = ——

p. 5 × 4,000 = ——

q. 0 × 8,000 = ——

r. 300 × 9 = ——

2 Add or subtract.

a.
```
    1 3 8
+   5 6 7
_____
```

b.
```
    6 5 3
−   2 9 6
_____
```

c.
```
    5 2 9
−   1 8 8
_____
```

d.
```
    7 8 4
+     9 2
_____
```

e.
```
    4 5 8
−   3 6 7
_____
```

f.
```
    5 8 2
+   5 2 8
_____
```

g.
```
  1, 2 5 5
+ 2, 1 5 0
_____
```

h.
```
  6, 2 0 2
− 4, 0 5 3
_____
```

i.
```
  8, 3 0 0
− 2, 1 5 0
_____
```

j.
```
  2, 7 8 0
+ 3, 4 3 0
_____
```

k.
```
  4, 1 3 0
+   5 2 4
+      6 4
_____
```

l.
```
       2 0
+   1 3 5
+ 2, 1 4 2
_____
```

m. 739 + 867 = ——

n. 5,000 − 3,536 = ——

o. 2,345 + 1,655 = ——

p. 783 − 571 = ——

q. 3,569 + 367 = ——

r. 9,351 − 2,987 = ——

3 Write the place value of the colored digit in each number.

a. **1**29,456 [ ] b. 26,**5**08 [ ]

c. 398,6**7**2 [ ] d. 3**0**4,467 [ ]

4 Write the value of the colored digit in each number.

a. 56**7**,211 [ ] b. 2**0**1,241 [ ]

c. **3**1,497 [ ] d. 85,00**2** [ ]

5 Put > , < or =.

a. 4,265 ◯ 4,189   b. 38,206 ◯ 38,106

c. 669,384 ◯ 669,382   d. 905,643 ◯ 905,593

e. 12,000 ◯ 12 hundreds   f. 15 thousands ◯ 1,500 tens

g. 93,257 ◯ 309,257   h. 1,025 ◯ 1,005
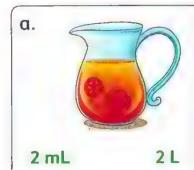
i. 5,035 + 30,000 ◯ 35 + 35,000   j. 31,508 ◯ Thirty thousand, five hundred eight.

6 Circle the better estimation for each.

a. 2 mL   2 L

b. 10 mL   10 L

c. 50 mL   50 L

7 How many mL are there ?

a.

b.

c.

_____

_____

_____

8 Choose the correct answer.

a. 5 L = ————— mL   (5 **or** 50 **or** 500 **or** 5,000)

b. 17 Liters = ————— milliliters   (17 **or** 170 **or** 1,700 **or** 17,000)

c. ————— L = 7,000 mL   (7 **or** 70 **or** 700 **or** 7,000)

d. ————— Liters = 10,000 milliliters   (10 **or** 100 **or** 1,000 **or** 1)

e. A family size of milk bottle is measured by —————   (mL **or** L)

f. Water in basin is measured by —————   (mL **or** L)

g. A perfume bottle is measured by —————   (mL **or** L)

9 Solve the following story problems.

a.
○ Bassem bought 5 books to read. Each book costs 90 pounds.
How much money did Bassem pay ?
_____
_____
_____

b.
○ Amgad has 5,000 L.E. He bought a new mobile for 3,550 L.E.
Find the remainder with Amgad.
_____
_____
_____
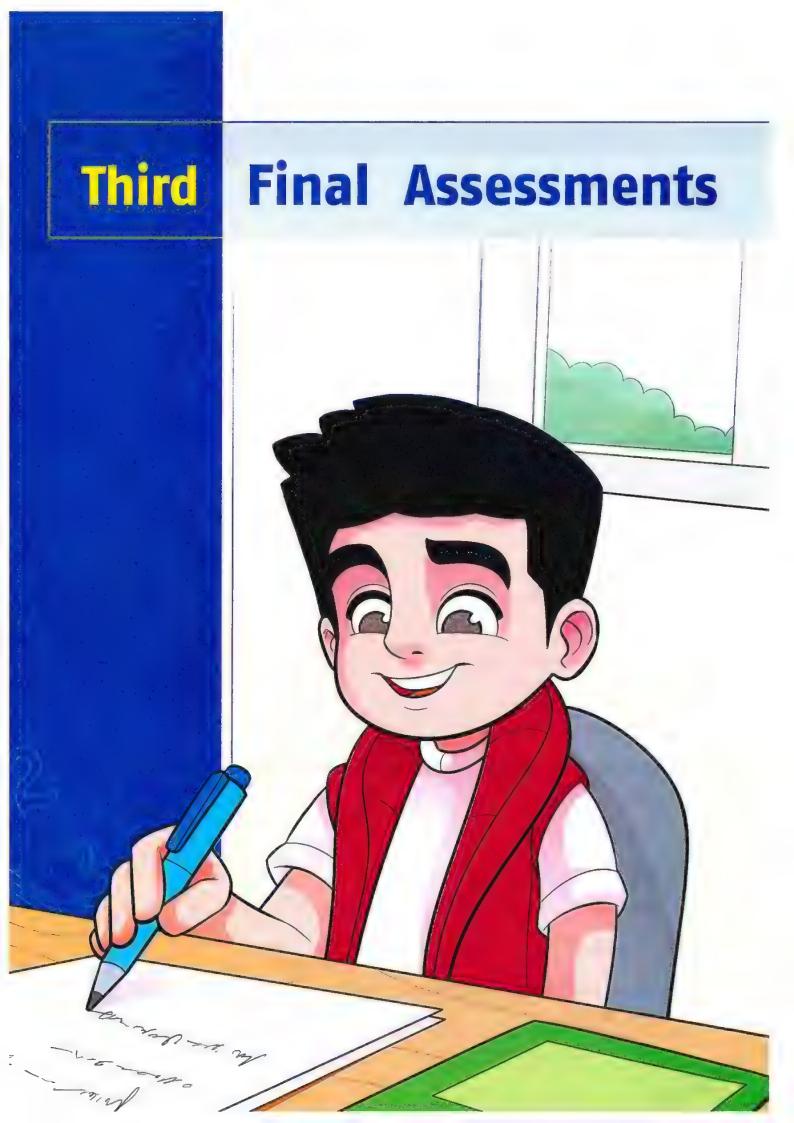
c.
○ In a fruit farm, there are 475 mango trees and 516 orange trees.
Find the number of all trees in this farm.
_____
_____
_____

d.
○ Yousra had 3,000 pounds. She spent 1,250 pounds at the market and 375 pounds at the butcher shop.
How much money were left with her ?
_____
_____
_____

82

Third Final Assessments

Model 1

1 Choose.

a. 84 cm = —————— mm

    ○ 84   ○ 840   ○ 8,400

b. 7,325 ☐ 999

    ○ >   ○ <   ○ =

c. 700 + 30,000 + 5 + 80 = ——————

    ○ 3,785   ○ 30,785   ○ 37,850

d. ———————— is a multiple of 3

    ○ 12   ○ 8   ○ 14

e. How many vertices are there in a parallelogram ?

    ○ 2   ○ 4   ○ 6

f. $9 \times 6 = (9 \times 4) + (9 \times \text{————})$

    ○ 9   ○ 5   ○ 2

---

2 Complete.

a. $3 \times 400 =$ ——————
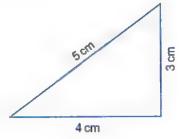
b. Four hundred fifty-one thousands, three hundred thirty-one in standard form is ———————

c. $7,315 + 1,283 =$ ——————

d. The perimeter of the opposite polygon = —— + —— + —— = —— cm

5 cm   3 cm   4 cm

e. $24 \div 4 =$ ——————

f. The minute hand will point to number ———————— when 45 minutes have passed.

3 Answer the following.

a. Ahmed has 15 eggs and wants to put them equally in 5 plates.
How many eggs are there in each plate ?
The number of eggs in each plate = —————————
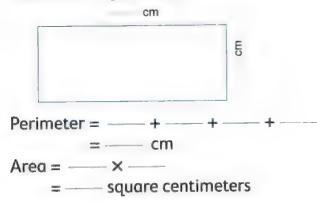
b. Write the time in two ways.

————:————

It's —————————

c. Find the perimeter and the area of the following figure.

———— cm

cm

Perimeter = ——— + ——— + ——— + ———
= ——— cm

Area = ——— × ———
= ——— square centimeters

d. Use a ruler to measure the length of each of the following.

1.

———— mm

2.

———— mm

3.

———— mm

4.

———— mm

4 Complete the tally table and the line plot.

Length of hand		
Length	Tally	Number
11 cm	‖‖ ‖	———
12 cm	‖‖ ‖	———
13 cm	‖‖ ‖‖	———
14 cm	‖‖	———
15 cm	‖‖	———

Length of hand

11   12   13   14   15
Length

Key Each **X** = 1 child

Model 2

1 Choose.

a. The place value of the digit 4 in the number 48,205 is ———

　　○ Hundred thousands 　　○ Ten thousands 　　○ Thousands

b. $2 \times$ —— $= 4 + 4 + 4$

　　○ 2 　　　　　　　　○ 4 　　　　　　　　○ 6

c. ——— is a common multiple of 2 and 3

　　○ 4 　　　　　　　　○ 12 　　　　　　　○ 8

d. 20,004 ☐ 4,002

　　○ > 　　　　　　　　○ < 　　　　　　　　○ =

e. The area of the opposite figure = ——— ☐

　　○ 8 　　　　　　　　○ 15 　　　　　　　○ 30

f. $300 \times 4 =$ ———

　　○ 12 　　　　　　　○ 120 　　　　　　　○ 1,200

---

2 Complete.

a. $7 \times 8 =$ ———

b. 25,607 in expanded form is ——— + ——— + ——— + ———

c. The perimeter of the rectangle which its dimensions are 5 cm and 6 cm is ——— cm

d. The examples for parallelograms are : ——— , ——— and ———

e. 3 liters = ——— mL

f. 20 , 24 , 28 , 32 , ——— , ——— , ——— (in the same pattern)

3 **Answer the following.**

a. Measure the length in mm.

 [   ] mm

b. Draw the clock hands which represent the digital clock.

05 : 40

c. Arrange the following numbers in a descending order.

| 15,001 | 50 thousands | 105,000 | 501 hundreds |

The order is : ——————— , ——————— , ——————— , ———————
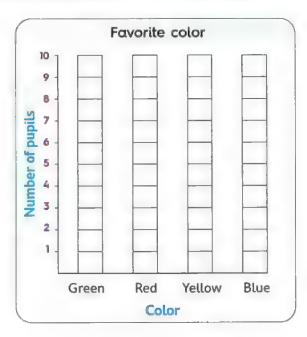
d. There are 6 apples in a box.
How many apples are there in 9 boxes ?

_____

e. Find the results.

1.
```
    5 8 7
  + 2 3 9
  _____
```

2.
```
    4 , 4 2 8
  − 1 , 1 5 3
  _____
```

f. Count the tallies. Write the total. Color the graph to show the data.

Favorite color		
Color	Tally	Number
Green	‖‖‖	———
Red	‖‖‖ ‖‖‖‖	———
Yellow	‖‖‖‖	———
Blue	‖‖‖ ‖‖	———

Favorite color

Number of pupils

10 9 8 7 6 5 4 3 2 1

Green   Red   Yellow   Blue

Color

Model 3

1 Choose.

a. $2 \underline{\quad\quad} 0 = 0$

◯ +   ◯ −   ◯ ×

b. $\underline{\quad\quad}$ is a common multiple of 5 and 10

◯ 25   ◯ 30   ◯ 15

c. The value of the digit 5 in 752,386 is $\underline{\quad\quad}$

◯ 500   ◯ 5,000   ◯ 50,000

d. $5 \times 8 \boxed{\quad} 4 \times 10$

◯ >   ◯ <   ◯ =

e. Which of the following does not represent a polygon ?

◯   ◯   ◯

f. $6 \div 3 = \underline{\quad\quad}$

◯ 18   ◯ 2   ◯ 3

---

2 Complete.

a. 5 thousands = $\underline{\quad\quad}$ tens.

b. 7 liters = $\underline{\quad\quad}$ milliliters.
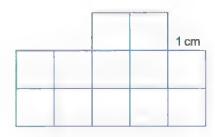
c. The factors of 4 are $\underline{\quad\quad}$, $\underline{\quad\quad}$, $\underline{\quad\quad}$

d. 13 , 17 , 21 , $\underline{\quad\quad}$ (in the same pattern)

e. The area of the opposite
   figure = $\underline{\quad\quad}$ square centimeters

1 cm

f. $7,592 - 4,317 = \underline{\quad\quad}$

3 **Answer the following.**

a. Sameh has 153 marbles , Marwan has 223 marbles.

How many marbles do they have all together ?

_____

_____

b. Write the numbers in order from least to greatest.

| 325,261 | 532,272 | 24,362 | 532,271 |

The order is : _____ , _____ , _____ , _____

c. Create an array.

4 rows of 2

3 columns of 5
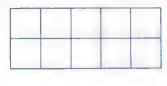
d. Our Math lesson started at 10:00.

It finished at

Math lesson took _____ minutes.

e. The area of the figure

= _____ × _____

= _____ ☐

Model 4

1 Choose.

a. 232 thousands and 4 [   ] 232,400

    ◯ >   ◯ <   ◯ =

b. ———— is a multiple of 2

    ◯ 13   ◯ 15   ◯ 20

c. The perimeter of the opposite figure is ———— units.

    ◯ 14   ◯ 15   ◯ 13

d. $3 \times 80 =$ ————

    ◯ 24   ◯ 240   ◯ 2,400

e. How many mL are there ?

    ◯ 40   ◯ 30   ◯ 20

f. $9 \times 8 =$ ————

    ◯ 63   ◯ 18   ◯ 72
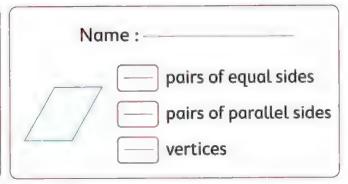
---

2 Complete.

a. $78,032 =$ ———— + ———— + ———— + ————

b. $24 \div 8 =$ ————

c. $5 \times 8 = (5 \times 5) + (5 \times$ ——$)$

d. ———— tens $= 800$

e. $7,453 + 3,572 =$ ————

f. ◯ ◇ ◯ ◇ ◯ ◇ ———— (in the same pattern)

3 **Answer the following.**

a. Name each figure and write the missing number.

Name : _____

☐ ──── equal sides

── pairs of parallel sides

──── vertices

Name : _____

── pairs of equal sides
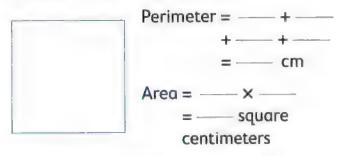
── pairs of parallel sides

── vertices

b. Draw the clock hands.

08 : 10
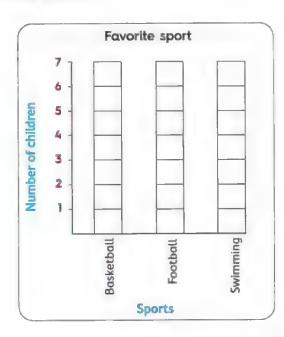
c. Find the perimeter and the area of the following square.

Perimeter = ──── + ────

+ ──── + ────

= ──── cm

Area = ──── × ────

= ──── square centimeters

d. Sarah has 4 packets of sweets with 5 pieces of sweets in each one. How many pieces of sweets Sarah has ?

_____

_____

_____

e. Count the tallies. Write the total. Color the graph.

Favorite sport		
Sport	**Tally**	**Number**
Basketball	|||	────
Football	‖‖‖ ||	────
Swimming	‖‖‖		────

Favorite sport

Number of children

7
6
5
4
3
2
1

Basketball   Football   Swimming

Sports

Model 5

1 Choose.

a. What number will the minute hand point to when 40 minutes have passed ?

    ◯ 7   ◯ 8   ◯ 9

b. $2 \times 6 =$ —————

    ◯ 4×5 ◯ 3×4 ◯ 12×0

c. The value of the digit 0 in the number 301,532 is

    ◯ 0   ◯ 1,000   ◯ 10,000

d. 700 mm = ————— cm

    ◯ 70   ◯ 7   ◯ 7,000

e. Which of the following does not represent a polygon ?

    ◯ Pentagon   ◯ Rectangle   ◯ Circle
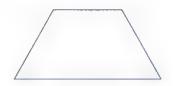
f. The name of the opposite figure is —————

    ◯ square   ◯ trapezium

    ◯ parallelogram

---

2 Complete.

a. Three thousand , two hundred five in standard form is —————

b. $7,400 - 3,213 =$ —————
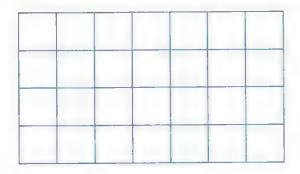
c. ————— $\times 9 = 45$

d. 94 , 84 , 74 , ————— , ————— (in the same pattern)

e. The length of the opposite figure = ————— cm

f. The factors of 12 are : ————— , ————— , ————— , ————— , ————— , —

3 **Answer the following.**

a. Draw a rectangle of perimeter 8 length units in the grid and find its area.

b. Draw the clock hands.

07 : 05

The area = —————— square units

c. 325 + 137 + 241 = ——————

= ——————

d. Find the result.

(1) $7 \times 8 =$ ——————

(2) $5 \times 7 =$

(3) $18 \div 2 =$ ——————
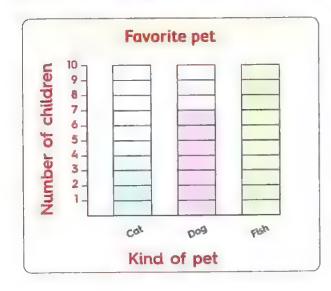
(4) $1 \times 8 =$ ——

e. Use the bar graph to complete the tally table.

Favorite pet

Number of children
10 9 8 7 6 5 4 3 2 1

Cat   Dog   Fish

Kind of pet

Favorite pet	
Pet	**Tally**
Cat	
Dog	
Fish	

Model 6

1 **Choose.**

a. 2×500 ☐ $999 + 1$

○ > ○ < ○ =

b. $6 + 6 + 6 + 6 =$ —— $\times 6$

○ 2 ○ 4 ○ 6

c. 800 mm = —— cm

○ 8 ○ 80 ○ 88

d. Which of the following does not represent a parallelogram ?

○ ☐ ○ ▱ ○ ⬠

e. 2 thousands = —— hundreds.

○ 2 ○ 20 ○ 200

f. $648 + 9,000 =$ ——

○ 90,648 ○ 9,648 ○ 64,809

2 **Complete.**

a. ☐ , ☐ , ☐☐ , —— , —— (in the same pattern)

b. Nine hundred sixty-eight thousands, four hundred thirty-one in standard form is ——

c. $42 \div 7 =$ ——

d. The smallest number that can be formed from the digits
3 , 0 , 4 , 5 , 6 , 2 is ——
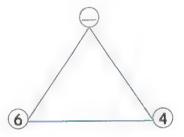
e. The number which the minute hand points to when 20 minutes have passed is ——

f. $7,326 - 5,296 =$ ——

3 **Answer the following.**

a. Find the answer.

134 + 97 + 215 + 345 = ———— + ———— = ————

b. Write the fact family.

—— × —— = ————   —— × —— = ————

—— ÷ —— = ————   —— ÷ —— = ————

c. Write the time in two ways.

1.

———— : ————

It is ————————————

2.

———— : ————
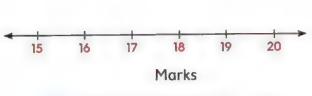
It is ————————————
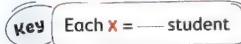
d. The school library had 5,775 books for borrowing. During one week 1,580 of them were borrowed and 370 books were missed.

How many books are there in the library right now ?

_____

_____

e. Complete the table and use it to draw a line plot.

Marks of students in an exam		
Marks	Tally	Number of students
15					
16			
17						
18	++++		
19						
20				

Marks of students in an exam

15   16   17   18   19   20

Marks

Key   Each **X** = —— student

Model 7

1 Choose.

a. The number of vertices of a hexagon = ———

    ◯ 3   ◯ 5   ◯ 6

b. $60 \times 3 =$ ———

    ◯ 18   ◯ 180   ◯ 120

c. ——— is a multiple of 3

    ◯ 6   ◯ 8   ◯ 10

d. The value of the digit 3 in the number 324,510 is ———

    ◯ 300   ◯ 3,000   ◯ 300,000

e. 150 thousands ☐ 1,500 hundreds

    ◯ >   ◯ <   ◯ =

f. ——— $= (8 \times 4) + (8 \times 5)$

    ◯ 8×9 ◯ 8×8 ◯ 8×5

---

2 Complete.

a. 30 , 32 , 34 , —— (in the same pattern)
    (+ —   + —   + —)

b. 35 liters = ——— mL

c.
    ——— rows of ———

    ☐ × ☐ = ———

d. $7 \times 3 =$ ———   e. $30 \div 5 =$ ———

f. $20,000 + 700 + 50 + 7 =$ ——— (in standard form)

3 Answer the following.

a. Arrange in an ascending order.

| 734,520 | 97,541 | 725,743 | 97,394 |
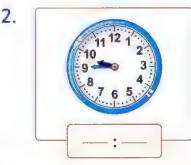
The order is : —————— , —————— , —————— , ——————

b. Write the time in two ways.

1.

—— : ——

It's _____

2.

—— : ——

It's _____

c. Find the result.

(1) 7,522 + 2,785 = ——————

(2) 3,741 − 579 = ——————

(3) 7 × 8 = ——————

(4) 24 ÷ 3 = ——————

d. Find the area and the perimeter of each of the following.

1.
—— cm

cm

Area = —————— square centimeters

Perimeter = —————— cm

2.
—— cm

cm

Area = —————— square centimeters

Perimeter = —————— cm

e. Color to reach the required measure. = 20 mL

1.

2.

Model 8

1 Choose.

a. Forty players are in teams of five. How many teams are there ?

○ 40 + 5   ○ 40 ÷ 5   ○ 40 − 5

b. ——— × 5 = 5

○ 0   ○ 1   ○ 5

c. ——— = 200 tens

○ 2,000   ○ 20   ○ 200

d. The area of the
   opposite figure = ——— ☐

○ 9   ○ 10   ○ 11

e. ——— is a common multiple of 3 and 5

○ 10   ○ 6   ○ 30

f. 4 + 4 + 4 + 4 + 4 = 4 × ———

○ 4   ○ 5   ○ 6

2 Complete.

a. 935,429 = ——— + ——— + 5,000 + ——— + ——— + 9

b. 28 ÷ —— = 7

c. The perimeter of the
   opposite figure = ——— units.

d. 70 mm = ——— cm

e. The value of the digit 0 in the number 30,248 is ———
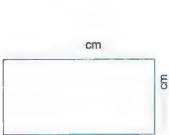
f. 9 × 7 = ———

3 **Answer the following.**

a. Measure the length of each object.

1.

———— mm

2.

———— mm

3.

———— mm

b. Find the result.

(1) 7,850 − 1,700 = ————

(2) 354 + 27 + 17 + 833 = ———— + ————

= ————

c. Join.

1. 3×8 2. 7×2 3. 3×4 4. 8×0

$20 - 6$ 2×6 7×0 4×6

d. What number will the minute hand point to when 10 minutes have passed ? ————

e. Find the area and the perimeter of each of the following.

cm

cm

———— cm

cm

Area = ———— square centimeters

Perimeter = ———— cm

Area = ———— square centimeters

Perimeter = ———— cm

Model 9

1 Choose.

a. $6 \times \underline{\qquad} = 48$

    ◯ 7   ◯ 8   ◯ 9

b. The area of the opposite figure is $\underline{\qquad}$ ☐

    ◯ 9   ◯ 12   ◯ 15

c. $5 \times 300 = \underline{\qquad}$ tens

    ◯ 1,500   ◯ 150   ◯ 15

d. 99×1 ☐ $99 + 1$

    ◯ >   ◯ <   ◯ =

e. $50,000 + 700,000 + 3 + 40 + 800 = \underline{\qquad}$

    ◯ 57,348   ◯ 843,705   ◯ 750,843

f. $58 \text{ cm} = \underline{\qquad}$ mm

    ◯ 58   ◯ 580   ◯ 5,800

2 Complete.

a. The perimeter of the triangle whose side lengths are 4 cm , 5 cm and 8 cm is $\underline{\qquad}$ cm

b. The trapezium has $\underline{\qquad}$ pair(s) of parallel sides and the parallelogram has $\underline{\qquad}$ pair(s) of parallel sides.

c. The value of the digit 4 in the number 904,526 is $\underline{\qquad}$ and its place value is $\underline{\qquad}$

d. $7 \times \underline{\qquad} = (7 \times 4) + (2 \times 7)$

e. $2,590 + 3,628 = \underline{\qquad}$

f. The factors of 8 are $\underline{\qquad}$, $\underline{\qquad}$, $\underline{\qquad}$,
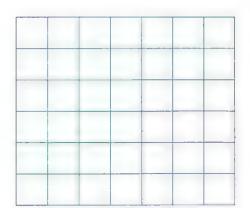
3 **Answer the following.**

a. Show 5 equal groups of 4 by drawing circles and dots then , find the product.

b. Find the results.

1.
$$\begin{array}{r} 9 \\ \times\ 9 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 8\ 0\ 2 \\ -\ \ \ 4\ 6 \\ \hline \end{array}$$
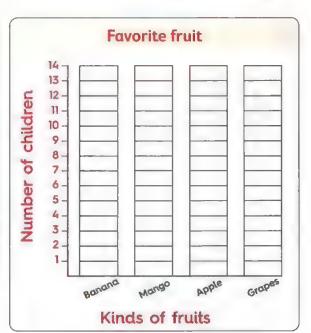
c. Draw a rectangle on the grid of area 20 square units and find its perimeter.

d. Hoda saw some dogs in a park. She counted 32 legs. How many dogs did Hoda see ?

e. Draw the clock hands , write the time in the digital clock to show the time "quarter to 4"

f. Convert the same information from the tally table into a bar graph.

Favorite fruit

Fruit	Tally
Banana	卌 卌 ||
Mango	卌 |||
Apple	卌 卌 ||||
Grapes	卌 |

Favorite fruit

Number of children

14
13
12
11
10
9
8
7
6
5
4
3
2
1

Banana Mango Apple Grapes

Kinds of fruits

Model 10

1 Choose.

a. Six thousand , five hundred two in standard form is ———

   ○ 6,520   ○ 6,502   ○ 6,052

b. $5 \times 9 =$ ———

   ○ 35   ○ 40   ○ 45

c. The estimated length of the opposite object = ———

   ○ 10 mm   ○ 10 cm   ○ 10 m

d. $40 \div 5$ ☐ 2×4

   ○ >   ○ <   ○ =

e. $700,000 =$ ——— hundreds

   ○ 7,000   ○ 700   ○ 70

f. $17 L =$ ——— mL

   ○ 17   ○ 1,700   ○ 17,000

2 Complete.

a. Hany went to a party at 7:00 , the party finished at
   , the time period of the party = ——— minutes.

b. The perimeter of the opposite triangle = ——— cm
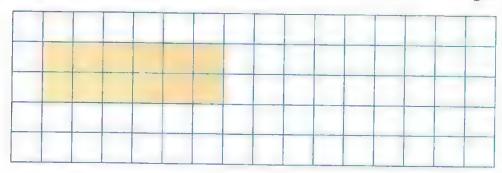
c. $500,000 + 40 + 700 =$ ———

d. $0 \times 8 =$ ———

e. ☆☆☆☆☆☆☆☆☆☆☆ ———

   (in the same pattern)

3 **Answer the following.**

a. Draw a rectangle of the same area of the drawn rectangle in the grid.

b. The school library had 7,530 books for borrowing. During one week 2,370 of them were borrowed. How many books were left ?

_____

_____

c. Complete the table.

Shape	Name	Number of sides	Number of vertices
□			
◇			
⬠			

d. Complete the tally table, then answer the questions

1. What is the number of children liked blue ? _____

2. Which color is liked the most ? _____

3. How many more children liked blue than red ? _____

Favorite color		
Color	Tally	Number
Red	|||	_____
Blue	⊬⊬ ||	_____
Yellow	⊬⊬ ⊬⊬		_____
Black	||||	_____

EL-MOASSER

Mathematics
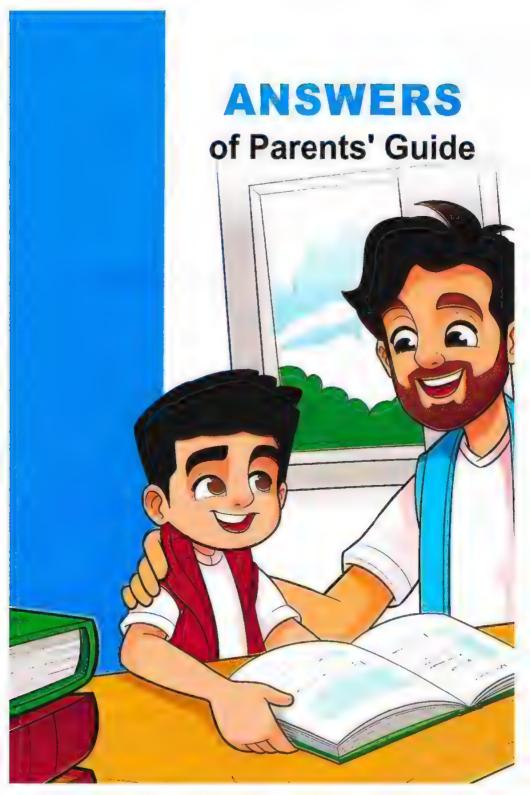
GUIDE ANSWERS   FREE PART

2

3rd PRIMARY
FIRST TERM
2025

Answers of Revision
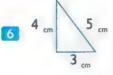
1 182 , Yes

2 01 : 30

3 245

4 a. odd   b. even   c. even   d. odd

5 a. <   b. >   c. =

6 8

7 a. 100   b. 300   c. 700

8 Sandwiches sold together
= 238 + 415 = 653 sandwiches

9 5

10 a.   b.

Revision 2

1 a. 754   b. 3   c. $\dfrac{2}{3}$
d. 9   e. 515

2 23 + 14 + 39 + 16
= (23 + 14) + (39 + 16)
= 37 + 55 = 92

3 5 kg   **4** 90

5   **6**
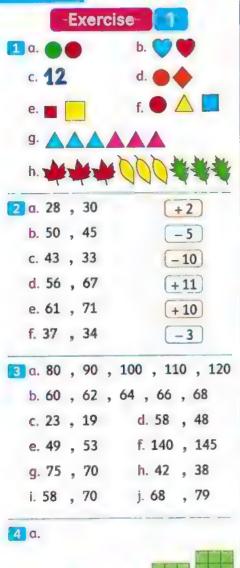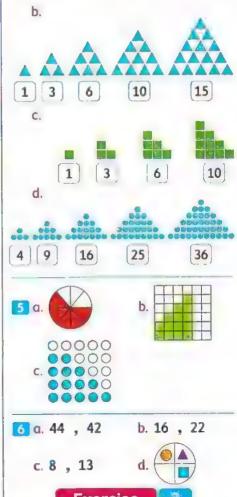
7 a. 171   b. 115

8 The money left = 354 − 160
= 194 pounds

9 a. 19 , 21 , 23
b. 59 , 49 , 39
c. 20 , 25 , 30

10 3 + 3 + 3 + 3
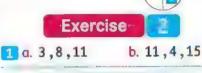
Revision 3

1 a. 4   b. 3
c. 70   d. 26

2 $\dfrac{2}{3}$

3 a. 338   b. 579

4 cylinder , 0 , 0 , 2

5 a. 233   b. 188

6 10

7 Order is : 291 , 219 , 192 , 129

8 a. Eighty   b. Five
c. Fourteen   d. Sixty

9 03 : 30   ,   P.M.

10 The weight in all = 67 + 85
= 152 kilograms

4

Answers of Chapter 1

Exercise 1

1 a. 🟢🔴 b. 💙❤️

c. **12** d. 🔴🔶

e. 🟥 🟨 f. 🔴 🔺 🟦

g. 🔺🔺🔺🔺🔺🔺

h. 🍁🍁🍁 🍃🍃🍃 🍃🍃🍃

2 a. 28 , 30 `+ 2`

b. 50 , 45 `– 5`

c. 43 , 33 `– 10`

d. 56 , 67 `+ 11`

e. 61 , 71 `+ 10`

f. 37 , 34 `– 3`

3 a. 80 , 90 , 100 , 110 , 120

b. 60 , 62 , 64 , 66 , 68

c. 23 , 19 d. 58 , 48

e. 49 , 53 f. 140 , 145

g. 75 , 70 h. 42 , 38

i. 58 , 70 j. 68 , 79

4 a.

`3` `6` `9` `12` `15`

b.

`1` `3` `6` `10` `15`

c.

`1` `3` `6` `10`

d.

`4` `9` `16` `25` `36`

5 a. b.

c.

6 a. 44 , 42 b. 16 , 22

c. 8 , 13 d.

Exercise 2

1 a. 3 , 8 , 11 b. 11 , 4 , 15

2 a.

Heads	Tails
卌 ‖	卌 卌
	‖‖

• 20

5

b.

Heads	Tails
ЖЖ ЖЖ	ЖЖ ЖЖ
‖	ЖЖ ‖‖

• 30

3

Shirt color		
Color	Tally	Number
Blue	ЖЖ ЖЖ	10
Red	ЖЖ ‖	7
Green	‖‖	3
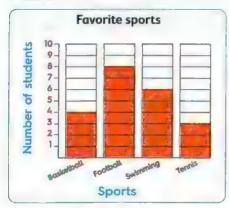
a. 10   b. Blue

c. Green , Red , Blue

4

Favorite Sports		
Sports	Number of students	Number
Basketball	‖‖‖	4
Football	ЖЖ ‖‖	8
Swimming	ЖЖ ‖	6
Tennis	‖‖	3
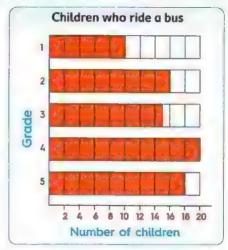
Favorite sports

a. 8   b. Football   c. Tennis

5

Children who ride a bus		
Grade	Number of children	Number
1	ЖЖ ЖЖ	10
2	ЖЖ ЖЖ ЖЖ ‖	16
3	ЖЖ ЖЖ ЖЖ	15
4	ЖЖ ЖЖ ЖЖ ЖЖ	20
5	ЖЖ ЖЖ ЖЖ ‖‖	18

Children who ride a bus
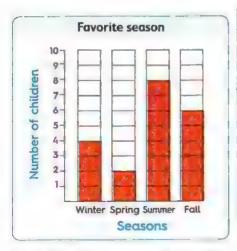
1. a. 20   b. 15
   c. Grade 4   d. Grade 1

2. a. ✓   b. ✗   c. ✓   d. ✗

6

Our favorite season		
Season	Tally	Number
Winter	‖‖‖	4
Spring	‖	2
Summer	ЖЖ ‖‖	8
Fall	ЖЖ ‖	6

Favorite season

1. a. Summer   b. Spring
   c. 20

2. a. ✓   b. ✗   c. ✓

7

Favorite activity
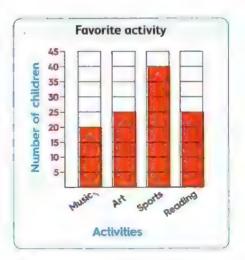
Vegetable	Tally	Number
Music	ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ	20
Art	ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ	25
Sports	ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ	40
Reading	ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ ⵜⵜ	25

Favorite activity

1. a. 20   b. Music
   c. Sports   d. 65
   e. 15

2. a. =   b. >

Exercise 3

1 a. 6   b. 3   c. 9

2 a. 4 students   b. 5 students
   c. 3 students   d. 6 students
   e. 21 students   f. 7 students
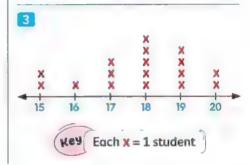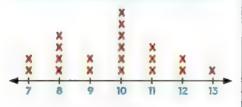
3

Key Each **x** = 1 student

4

Ages of children in karate class

Ages of children

key Each **x** = 1 child
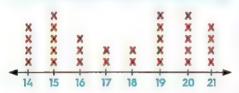
a. 3 b. 10 c. 20

5

Hours	14	15	16	17	18	19	20	21
Tally	IIII	ШН	III	II	II	ШН	ШН	IIII
Frequency	4	5	3	2	2	5	5	4

Study hours per week

Number of hours
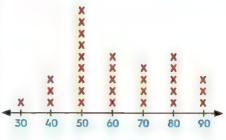
key Each **x** stands for 1 student

a. 2 students b. 4 students
c. 5 students d. 2 students

6

Saved money	30	40	50	60	70	80	90
Frequency	1	3	9	5	4	5	3

Money saved in a week

Saved money

key Each x stands for 1 child

1. a. 3 b. 1 c. 50
2. a. ✓ b. ✗ c. ✗

Exercise 4

1 a. centimeter b. millimeter
c. meter d. meter
e. centimeter f. meter

2 a. 5 b. 6 c. 7
d. 34 e. 3 f. 32
g. 43 h. 51 I. 4
j. 4 k. 4

3 3 , 4 , 2 , 5
The order is : **5 , 4 , 3 , 2**

4 a. ⟶ 4 b. ⟶ 3
   c. ⟶ 1 d. ⟶ 2

---

5 a. ✗ b. ✓ c. ✗
   d. ✓ e. ✗

---

6 a. 30 b. 240 c. 7
   d. 50 e. 500 f. 2
   g. 6 h. 70

---

7 a. 70 b. 30 c. 400
   d. 800 e. 180 f. 500
   g. 5 h. 3 i. 4
   j. 20 k. 100 l. 1
   m. 70 n. 60 o. 800
   p. 600 q. 8 r. 9
   s. 3 , 50 t. 7 , 5

8 a. ✓ b. ✓ c. ✓
   d. ✗ e. ✓ f. ✗

---

9 a. > b. = c. <
   d. > e. > f. =
   g. < h. = i. <
   j. < k. > l. <
   m. < n. <

---

10 90 cm.

---

11 a. 30 b. 20 c. 70
   d. 6 e. 200 f. 5

Answers of Chapter 2

1

Number	Thousands	Hundreds	Tens	Ones
a. 5,839	5	8	3	9
b. 7,256	7	2	5	6
c. 2,103	2	1	0	3
d. 4,360	4	3	6	0
e. 5,018	5	0	1	8
f. 918	0	9	1	8

2
a. 3,000 b. 4,000
c. 9 d. 70
e. 0 f. 100
g. 60 h. 30

3
a. Thousands , 3,000
b. Thousands , 6,000
c. Ones , 2 d. Ones , 3
e. Hundreds , 600
f. Thousands , 1,000
g. Tens , 0
h. Hundreds , 500
i. Thousands , 5,000
j. Tens , 80 k. Hundreds , 0
l. Thousands , 2,000

4
a. 3,000 + 200 + 80 + 4
b. 5,000 + 100 + 20 + 3
c. 9,000 + 800 + 50 + 6
d. 8,000 + 30 + 2
e. 7,000 + 500 + 4
f. 6,000 + 800 g. 4,000 + 1

5
a. 2,634 b. 6,871
c. 4,593 d. 3,309
e. 6,021 f. 1,110
g. 7,650 h. 9,005
i. 1,900 j. 5,040

6
a. 8,000 + 400 + 90 + 1 = 8,491
b. 2,000 + 100 + 70 + 5 = 2,175
c. 3,000 + 500 + 20 + 7 = 3,527
d. 9,000 + 700 + 2 = 9,702
e. 1,000 + 40 + 8 = 1,048
f. 4,000 + 500 + 3 = 4,503
g. 5,000 + 700 + 10 + 6 = 5,716
h. 3,000 + 40 + 6 = 3,046

7
a. 2,000 b. 3,003
c. 20 , 5 d. 40
e. 400 f. 70 , 700 , 7,000
g. 80 , 3,000 h. 4,000 , 6
i. 7 , 6 , 4 , 9 j. 5 , 3 , 0 , 2

8
a. 5,378 b. 2,531
c. 9,406 d. 1,054
e. 3,002 f. 4,040
g. 2,017 h. 8,500

9
a. Three thousand , seven hundred fifty-one
b. Four thousand , four
c. Seven thousand , two hundred
d. Six thousand , five hundred ten
e. Five thousand , three hundred seventeen

f. Eight thousand , eighty

g. Five thousand , three hundred twenty-six

h. Two thousand , twenty

10 a. 6   b. 20   c. 700

d. 8   e. 5   f. 90

g. 300   h. 80   i. 4,000

j. 8,000   k. 40   l. 800

11 a. <   b. <   c. <

d. >   e. <   f. >

g. >   h. >   i. =

j. <   k. <   l. >

m. <   n. =   o. =

12 a. 9,843 , 3,489   b. 5,432 , 2,345

c. 8,651 , 1,568   d. 7,544 , 4,457

e. 7,320 , 2,037   f. 9,430 , 3,049

13 a. The order is : 987 , 6,978 , 6,987 , 7,896

b. The order is : 3,521 , 4,782 , 5,336 , 9,835

c. The order is : 993 , 1,281 , 2,990 , 4,621 , 6,170

d. The order is : 784 , 4,278 , 4,279 , 7,249 , 7,942

14 a. The order is : 5,300 , 3,805 , 1,500 , 1,050

b. The order is : 9,541 , 7,321 , 6,541 , 941

c. The order is : 5,719 , 3,010 , 2,605 , 1,938 , 456

d. The order is : 6,204 , 5,441 , 3,009 , 2,917 , 708

15 a. Hundreds   b. 9,000

c. 9,999   d. 1,000

e. 9,876   f. 1,023

g. 1,111   h. 9,998

16 a. ✓   b. ✓

c. ✗   d. ✗

e. ✓   f. ✗

g. ✗

17 The numbers are : 5,432 , 5,423 and 5,342   (Answers may vary)

18 2,319

Exercise 6

1 a. ⑥5,810   b. ③08,001

c. ⑨21,348   d. 200,⑦20

e. 10②,421   f. 31,0⑥5

g. 85,60⑨   h. 4⓪7,105

2 a. 3,000   b. 80,000

c. 50   d. 200

e. 500,000   f. 90,000

g. 0   h. 1,000

3
a. Ten thousands , 60,000

b. Ten thousands , 80,000

c. Hundred thousands , 700,000

d. Hundred thousands , 100,000

e. Hundreds , 300

f. Ten thousands , 40,000

g. Thousands , 0

h. Thousands , 1,000

I. Thousands , 9,000

j. Hundreds , 0

4
a. Hundred thousands

b. 700,000

c. Ten thousands

d. 0   e. 5

f. 5

g. Hundred thousands

h. Ten thousands

5

a. 31,574	b. 278,621
c. 308,010	d. 504,030
e. 97,205	f. 330,300
g. 39,415	h. 68,092
i. 300,928	j. 500,505

6
a. 90,000 + 5,000 + 600 + 80 + 3

b. 500,000 + 40,000 + 3,000
+ 800 + 70 + 6

c. 60,000 + 2,000 + 300 + 10 + 9

d. 700,000 + 60,000 + 2,000
+ 300 + 10 + 9

e. 10,000 + 5,000 + 700 + 80

f. 200,000 + 30,000 + 40 + 5

g. 70,000 + 100 + 10 + 6

h. 800,000 + 10,000 + 2,000 + 4

i. 400,000 + 40

7
a. 90,000

b. 500,000 , 1,000   c. 8,000

d. 40,000   e. 600,000 , 1

f. 100,000 , 2,000   g. 210,564

h. 35,029   i. 25,798

j. 905,017   k. 16,439

8
a. Two hundred thirty-five
thousand , seven hundred
ninety-one

b. Nine hundred four thousand , six

c. Seventy-one thousand ,
seventy-one

d. Sixty thousand , six hundred six

e. Seven hundred forty-six
thousand , ninety

f. Fifty-four thousand , three
hundred twenty-nine

g. Seven hundred nine thousand
, fifty.

h. Eighty thousand , six hundred
thirty-six

9
a. ⟶ 50,000

b. ⟶ Hundred thousands

c. ⟶ Ten thousands

d. ⟶ 500,000

e. ⟶ 505,055

f. ⟶ 550,550

10 a. < b. > c. >

d. > e. < f. <

g. = h. = i. <

j. = k. > l. >

m. < n. = o. <

p. < q. =

11 a. 87,632 , 23,678

b. 864,321 , 123,468

c. 97,210 , 10,279

d. 653,210 , 102,356

e. 87,400 , 40,078

f. 975,310 , 103,579

g. 975,421 , 124,579

h. 973,110 , 101,379

12 a. **The order is :**
9,372 , 11,493 , 98,505 , 132,567

b. **The order is :**
27,256 , 27,652 , 125,762 ,
152,567

c. **The order is :**
8,339 , 83,986 , 83,987
, 833,322 , 833,400

d. **The order is :**
93,259 , 96,547 , 932,599
, 965,478 , 965,852

e. **The order is :**
4,720 , 24,270 , 24,571
, 724,072 , 724,172

f. **The order is :**
100,000 , 102,345 , 111,111
, 987,654 , 999,999

13 a. **The order is :**
103,002 , 23,001 , 21,300 , 3,201

b. **The order is :**
101,559 , 59,002 , 21,052 , 11,112

c. **The order is :**
773,550 , 637,961 , 618,765
, 81,236 , 38,472

d. **The order is :**
914,231 , 914,230 , 12,606
, 12,605 , 9,380

e. **The order is :**
500,007 , 500,000 , 100,000
, 99,999 , 3,428

14 a. ✗ b. ✓ c. ✓

d. ✗ e. ✗ f. ✗

g. ✗ h. ✓

15 99,999 , 716,012 , 50,214
, 321,000 , 200,100

16 111,111 , 200,000 , 20,000
, 13,699 , 9,216

17 4

18 93,210 (Answer may vary)

13

Exercise 7

1 a. 4 , 4   b. 2 , 7

c. 6 , 3   d. 1 , 5

e. 5 , 3   f. 4 , 4

2 a. 2 rows of 3

```
x x x
x x x
```

b. 4 rows of 2

```
x x
x x
x x
x x
```

c. 1 row of 6

```
x x x x x x
```

d. x 1 column
   x   of 5
   x
   x
   x

e. 3 columns of 4

```
x x x
x x x
x x x
x x x
```

f. 7 columns of 2

```
x x x x x x x
x x x x x x x
```

3 a. 12   b. 10

c. 14   d. 18
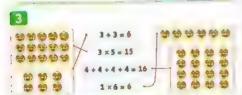
4 a. 2 , 5 , 10   b. 7 , 1 , 7

c. 5 , 3 , 15   d. 4 , 3 , 12

e. 3 , 5 , 15   f. 6 , 3 , 18

5 a. 4 , 3 , 12   b. 5 , 3 , 15

c. 1 , 5 , 5   d. 6 , 3 , 18

6 a. Repeated addition : $4 + 4 + 4 = 12$

Skip counting : 4 , 8 , 12

b. Repeated addition : $5 + 5 = 10$

Skip counting : 5 , 10

c. Repeated addition : $1 + 1 + 1 = 3$

Skip counting : 1 , 2 , 3

d. Repeated addition : $3 + 3 = 6$

Skip counting : 3 , 6

e. Repeated addition : $7 + 7 + 7 = 21$

Skip counting : 7 , 14 , 21

f. Repeated addition : $4 + 4 + 4 + 4 = 16$

Skip counting : 4 , 8 , 12 , 16

7 $5 + 5 + 5 + 5 = 20$

Exercise 8

1 a. $2 + 2 + 2 + 2 + 2 = 10$, $5 \times 2 = 10$

b. $4 + 4 = 8$, $2 \times 4 = 8$

c. $3 + 3 + 3 = 9$, $3 \times 3 = 9$

d. $5 + 5 + 5 + 5 = 20$, $4 \times 5 = 20$

e. $4 + 4 + 4 + 4 + 4 + 4 = 24$, $6 \times 4 = 24$

f. $6 + 6 + 6 + 6 + 6 = 30$, $5 \times 6 = 30$

2 a. 2 rows of 5 , $2 \times 5 = 10$

b. 4 rows of 5 , $4 \times 5 = 20$

c. 3 rows of 6 , $3 \times 6 = 18$

d. 5 columns of 2 , $5 \times 2 = 10$

e. 2 columns of 4 , $2 \times 4 = 8$

f. 5 columns of 3 , $5 \times 3 = 15$

g. 4 columns of 3 , $4 \times 3 = 12$

h. 4 rows of 1 , $4 \times 1 = 4$

i. 3 columns of 4 , $3 \times 4 = 12$

j. 3 rows of 3 , $3 \times 3 = 9$

k. 5 rows of 4 , $5 \times 4 = 20$

l. 6 columns of 4 , $6 \times 4 = 24$

3

$3 + 3 = 6$
$3 \times 5 = 15$
$4 + 4 + 4 + 4 = 16$
$1 \times 6 = 6$

4 a. 4 , 12   b. 3 , 21

c. 5 , 20   d. 5 , 5 , 5 , 5 , 20

e. 6 , 3 , 18   f. 4 , 9 , 36

g. 6 , 1 , 6   h. 4 , 8 , 32

i. 7 , 7 , 7 , 7 , 28   j. 9 , 9 , 18

k. 2 , 2 , 2 , 6

l. 6 , 6 , 6 , 6 , 24

m. 6 , 18

n. 5 , 5 , 5 , 5 , 5 , 25
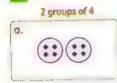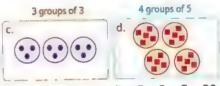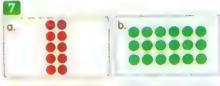
o. 3 , 24

p. 5 , 10

5 a. 5   b. 4×2

c. 9   d. 3

e. 7

6

2 groups of 4

a.

$4 + 4 = 8$
$2 \times 4 = 8$

3 groups of 2

b.

$2 + 2 + 2 = 6$
$3 \times 2 = 6$

3 groups of 3

c.

$3 + 3 + 3 = 9$
$3 \times 3 = 9$

4 groups of 5

d.

$5 + 5 + 5 + 5 = 20$
$4 \times 5 = 20$

2 groups of 3

e.

$3 + 3 = 6$
$2 \times 3 = 6$

5 groups of 4

f.

$4 + 4 + 4 + 4 + 4 = 20$
$5 \times 4 = 20$

7

a.

$5 \times 2 = 10$

b.

$3 \times 6 = 18$

c.

$5 \times 5 = 25$

d.

$2 \times 8 = 16$

e.

$4 \times 7 = 28$

Exercise 9

1
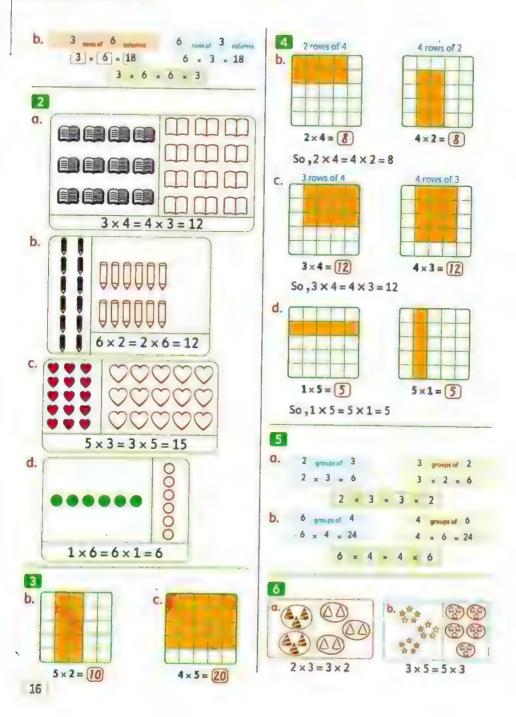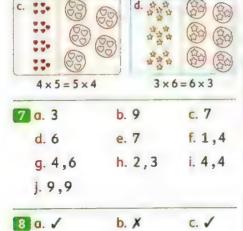
a. 5 rows of 3 columns   3 rows of 5 columns

$5 \times 3 = 15$ $\boxed{3} \times \boxed{5} = \boxed{15}$

$\boxed{5} \times \boxed{3} = \boxed{3} \times \boxed{5}$

15

b.

3 rows of 6 columns   6 rows of 3 columns

$3 \times 6 = 18$ $6 \times 3 = 18$

$3 \times 6 = 6 \times 3$

2

a.

$3 \times 4 = 4 \times 3 = 12$

b.

$6 \times 2 = 2 \times 6 = 12$

c.

$5 \times 3 = 3 \times 5 = 15$

d.

$1 \times 6 = 6 \times 1 = 6$

3

b.

$5 \times 2 = 10$

c.

$4 \times 5 = 20$

4

b. 2 rows of 4   4 rows of 2

$2 \times 4 = 8$ $4 \times 2 = 8$

So, $2 \times 4 = 4 \times 2 = 8$

c. 3 rows of 4   4 rows of 3

$3 \times 4 = 12$ $4 \times 3 = 12$

So, $3 \times 4 = 4 \times 3 = 12$

d.

$1 \times 5 = 5$ $5 \times 1 = 5$

So, $1 \times 5 = 5 \times 1 = 5$

5

a. 2 groups of 3   3 groups of 2

$2 \times 3 = 6$ $3 \times 2 = 6$

$2 \times 3 = 3 \times 2$

b. 6 groups of 4   4 groups of 6

$6 \times 4 = 24$ $4 \times 6 = 24$

$6 \times 4 = 4 \times 6$

6

a.

$2 \times 3 = 3 \times 2$

b.

$3 \times 5 = 5 \times 3$

16

c.

$4 \times 5 = 5 \times 4$

d.

$3 \times 6 = 6 \times 3$

9 a. ⟶ 4×3

b. ⟶ 5×2

c. ⟶ 3×5

d. ⟶ $5 + 0$

7 a. 3   b. 9   c. 7

d. 6   e. 7   f. 1 , 4

g. 4 , 6   h. 2 , 3   i. 4 , 4

j. 9 , 9

10

45 blocks.

8 a. ✓   b. ✗   c. ✓

d. ✓   e. ✗   f. ✗

Answers of Chapter 3
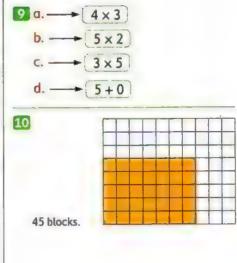
1 a. ⟶ $3 \times 5 = 15$
  b. ⟶ $3 \times 2 = 6$
  c. ⟶ $6 \times 2 = 12$
  d. ⟶ $2 \times 5 = 10$

2 a. $2 \times 5 = 10$ pieces
  b. $4 \times 5 = 20$ rolls
  c. $6 \times 3 = 18$ cookies
  d. $8 \times 3 = 24$ pencils
  e. $2 \times 9 = 18$ hours
  f. $4 \times 8 = 32$ oranges
  g. $6 \times 4 = 24$ legs
  h. $5 \times 7 = 35$ balls
    $4 \times 7 = 28$ balls
    Number of balls
    $= 35 + 28 = 63$ balls

3 Answer may very based on your own story

Sample answer :
Vera has 4 bags each bag has 5 toys.
How many toys are there in all ?

$4 \times 5 = 20$ toys

4 Ways of solving may vary

Skip counting by 13 s

$13 , 26 , 39 , 52 , 65 , 78 , 91$

$104 , 117 , 130 , 143 , 156$

then, $12 \times 13 = 156$

1

2×0	$= 0$	3×0	$= 0$
2×1	$= 2$	3×1	$= 3$
2×2	$= 4$	3×2	$= 6$
2×3	$= 6$	3×3	$= 9$
2×4	$= 8$	3×4	$= 12$
2×5	$= 10$	3×5	$= 15$
2×6	$= 12$	3×6	$= 18$
2×7	$= 14$	3×7	$= 21$
2×8	$= 16$	3×8	$= 24$
2×9	$= 18$	3×9	$= 27$
2×10	$= 20$	3×10	$= 30$

4×0	$= 0$	2×7	$= 14$
4×1	$= 4$	2×5	$= 10$
4×2	$= 8$	2×2	$= 4$
4×3	$= 12$	2×3	$= 6$
4×4	$= 16$	2×9	$= 18$
4×5	$= 20$	2×1	$= 2$
4×6	$= 24$	2×4	$= 8$
4×7	$= 28$	2×8	$= 16$
4×8	$= 32$	2×6	$= 12$
4×9	$= 36$	2×10	$= 20$
4×10	$= 40$	2×0	$= 0$

$3 \times 5 = 15$	$4 \times 3 = 12$
$3 \times 1 = 3$	$4 \times 9 = 36$
$3 \times 7 = 21$	$4 \times 6 = 24$
$3 \times 0 = 0$	$4 \times 1 = 4$
$3 \times 9 = 27$	$4 \times 10 = 40$
$3 \times 2 = 6$	$4 \times 0 = 0$
$3 \times 10 = 30$	$4 \times 2 = 8$
$3 \times 4 = 12$	$4 \times 7 = 28$
$3 \times 6 = 18$	$4 \times 4 = 16$
$3 \times 3 = 9$	$4 \times 8 = 32$
$3 \times 8 = 24$	$4 \times 5 = 20$

5 a. ⟶ $5 + 5$ b. ⟶ 3×2
c. ⟶ $6 + 3$ d. ⟶ 3×6
e. ⟶ 6×2

6 a. 4×3 , 2×6
b. 8×3 , 4×6
c. 3×6 , 9×2
d. 4×0 , 0×3

7 a. 5   b. 10   c. 9   d. 6
e. 9   f. 9   g. 0   h. 2
i. 3   j. 4   k. 8   l. 7
m. 4   n. 8   o. 0   p. 1

2 a. 21   b. 8   c. 16   d. 24
e. 2   f. 15   g. 4   h. 12
i. 28   j. 12   k. 16   l. 15
m. 20   n. 40   o. 24   p. 32
q. 6   r. 14   s. 12   t. 18
u. 2   v. 10   w. 18   x. 30
y. 9   z. 6

8 a. >   b. >   c. >   d. =
e. =   f. >   g. =   h. <
i. <   j. <   k. =   l. =
m. <   n. =   o. >   p. <
q. =   r. <

9 a. $4 \times 9 = 36$ L.E.
b. $3 \times 10 = 30$ flowers
c. $2 \times 8 = 16$ lions

3 a. 32   b. 20   c. 4   d. 27
e. 20   f. 8   g. 0   h. 18
i. 3   j. 3   k. 27   l. 8
m. 0   n. 14   o. 20

10 a. 24 , 32 , 50 , 44
b. 18 , 33
c. 16 , 12 , 20
d. 2 , 4 , 6 , 8 , 10 , 12 , 14 , 16 , 18 , 20 , 22 , 24 , 26 , 28 , 30
e. 32 , 34 , 36 , 38 , 40 , 42 , 44 , 46 , 48 , 50 , 52 , 54

4 a. ✗   b. ✓   c. ✓   d. ✗
e. ✗   f. ✓   g. ✓   h. ✗
i. ✓   j. ✓   k. ✗   l. ✓
m. ✓   n. ✗   o. ✓   p. ✓

f. 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39

g. 42, 45, 48

h. 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

i. 42, 48, 54 (Answers may vary)

j. 84, 90, 96

11 a. +   b. ×   c. +

d. +   e. ×   f. +

12 1, 2 and 3

7×0	$= 0$
7×1	$= 7$
7×2	$= 14$
7×3	$= 21$
7×4	$= 28$
7×5	$= 35$
7×6	$= 42$
7×7	$= 49$
7×8	$= 56$
7×9	$= 63$
7×10	$= 70$

Exercise 12

1

5×0	$= 0$
5×1	$= 5$
5×2	$= 10$
5×3	$= 15$
5×4	$= 20$
5×5	$= 25$
5×6	$= 30$
5×7	$= 35$
5×8	$= 40$
5×9	$= 45$
5×10	$= 50$

6×0	$= 0$
6×1	$= 6$
6×2	$= 12$
6×3	$= 18$
6×4	$= 24$
6×5	$= 30$
6×6	$= 36$
6×7	$= 42$
6×8	$= 48$
6×9	$= 54$
6×10	$= 60$

2

5×6	$= 30$
5×2	$= 10$
5×1	$= 5$
5×8	$= 40$
5×0	$= 0$
5×3	$= 15$
5×10	$= 50$
5×7	$= 35$
5×5	$= 25$
5×4	$= 20$
5×9	$= 45$

6×4	$= 24$
6×10	$= 60$
6×0	$= 0$
6×3	$= 18$
6×1	$= 6$
6×6	$= 36$
6×5	$= 30$
6×8	$= 48$
6×2	$= 12$
6×7	$= 42$
6×9	$= 54$

$7 \times 8 = 56$

$7 \times 1 = 7$

$7 \times 9 = 63$

$7 \times 0 = 0$

$7 \times 2 = 14$

$7 \times 10 = 70$

$7 \times 6 = 42$

$7 \times 3 = 21$

$7 \times 5 = 35$

$7 \times 4 = 28$

$7 \times 7 = 49$

3 a. 49   b. 30   c. 24

d. 21   e. 48   f. 70

g. 30   h. 10   i. 40

j. 20   k. 5   l. 45

m. 28   n. 35   o. 36

p. 42   q. 54   r. 56

s. 35   t. 14   u. 25

v. 0   w. 18   x. 42

y. 63   z. 15

4 a. 50   b. 70   c. 10

d. 25   e. 30   f. 15

g. 56   h. 60   i. 35

j. 42

5 a. <   b. <   c. <

d. <   e. >   f. >

g. >   h. >   i. >

j. <   k. <   L =

m. <   n. <   o. >

p. >   q. >   r. <

s. =   t. <   u. <

v. =

6 a. 3×10 b. 27

c. 8×3 d. 35

e. 0   f. $1 - 1$

g. $40 + 5$ h. $3 + 10$

i. 6×4 j. 6×8

k. 5×8

7 a. ⟶ 2   b. ⟶ 1

c. ⟶ 3   d. ⟶ 5

e. ⟶ 4

8 a. ✓   b. ✗   c. ✓

d. ✓   e. ✓   f. ✓

g. ✓   h. ✗   I. ✗

j. ✓   k. ✓   l. ✓

9 a. Yes   b. Yes   c. No

d. Yes   e. Yes   f. No

10 a. $6 \times 2 = 12$ kg

b. $8 \times 5 = 40$ pupils

c. $7 \times 4 = 28$ pounds

d. $5 \times 9 = 45$ oranges

11 a. 30 , 60 and 90

b. 35 , 70 and 105

12 The number of multiples is 0

Exercise 13

1

$8 \times 0 = 0$	$9 \times 0 = 0$
$8 \times 1 = 8$	$9 \times 1 = 9$
$8 \times 2 = 16$	$9 \times 2 = 18$
$8 \times 3 = 24$	$9 \times 3 = 27$
$8 \times 4 = 32$	$9 \times 4 = 36$
$8 \times 5 = 40$	$9 \times 5 = 45$
$8 \times 6 = 48$	$9 \times 6 = 54$
$8 \times 7 = 56$	$9 \times 7 = 63$
$8 \times 8 = 64$	$9 \times 8 = 72$
$8 \times 9 = 72$	$9 \times 9 = 81$
$8 \times 10 = 80$	$9 \times 10 = 90$

$10 \times 0 = 0$
$10 \times 1 = 10$
$10 \times 2 = 20$
$10 \times 3 = 30$
$10 \times 4 = 40$
$10 \times 5 = 50$
$10 \times 6 = 60$
$10 \times 7 = 70$
$10 \times 8 = 80$
$10 \times 9 = 90$
$10 \times 10 = 100$

2

$8 \times 3 = 24$	$9 \times 8 = 72$
$8 \times 5 = 40$	$9 \times 2 = 18$
$8 \times 9 = 72$	$9 \times 6 = 54$
$8 \times 0 = 0$	$9 \times 10 = 90$
$8 \times 7 = 56$	$9 \times 4 = 36$
$8 \times 2 = 16$	$9 \times 0 = 0$
$8 \times 4 = 32$	$9 \times 7 = 63$
$8 \times 6 = 48$	$9 \times 3 = 27$
$8 \times 8 = 64$	$9 \times 9 = 81$
$8 \times 1 = 8$	$9 \times 5 = 45$
$8 \times 10 = 80$	$9 \times 1 = 9$

$10 \times 0 = 0$
$10 \times 3 = 30$
$10 \times 6 = 60$
$10 \times 9 = 90$
$10 \times 1 = 10$
$10 \times 4 = 40$
$10 \times 7 = 70$
$10 \times 5 = 50$
$10 \times 2 = 20$
$10 \times 8 = 80$
$10 \times 10 = 100$

3
a. 56	b. 54	c. 40
d. 0	e. 45	f. 100
g. 16	h. 81	i. 60
j. 32	k. 9	l. 70
m. 8	n. 72	o. 24
p. 36	q. 64	r. 80
s. 80	t. 63	u. 40
v. 72	w. 48	x. 50
y. 90	z. 30	

4
a. 40	b. 100	c. 20
d. 45	e. 40	f. 30
g. 48	h. 63	i. 10
j. 40	k. 90	l. 80

5
a. <	b. <	c. <
d. <	e. >	f. =
g. =	h. >	i. <
j. =	k. >	l. <
m. <	n. >	o. >
p. <	q. <	r. =
s. <	t. >	u. =
v. <	w. <	x. =
y. =	z. <	

6
a. 4×10 b. 43
c. 6×10
d. $10 + 10 + 10 + 10 + 10$
e. 45   f. 2
g. 0   h. $1 - 1$

i. 90   j. 0×12
k. 3×10 l. 9×10
m. 8×0

7
a. ⟶ 4   b. ⟶ 3
c. ⟶ 5   d. ⟶ 1
e. ⟶ 2

8
a. ✓	b. ✓	c. ✗
d. ✗	e. ✓	f. ✓
g. ✗	h. ✓	i. ✗
j. ✗	k. ✗	l. ✗
m. ✗	n. ✓	

9
a. 70 , 80 and 90
b. 100 , 110 and 120
c. 10 , 20 and 30
   (Answers may vary)

10
a. $8 \times 9 = 72$ pieces
b. $10 \times 9 = 90$ pounds
c. $8 \times 6 = 48$ carriages

11 No , the multiples of 10 its ones
digit is 0

Review on the multiples

1
1. 28	2. 45	3. 63
4. 64	5. 24	6. 30
7. 36	8. 48	9. 40
10. 72	11. 24	12. 6

13. 0	14. 48	15. 81
16. 35	17. 18	18. 56
19. 54	20. 30	21. 63
22. 42	23. 16	24. 50
25. 32	26. 45	27. 49
28. 90	29. 56	30. 54
31. 0	32. 35	33. 36
34. 72	35. 28	36. 3
37. 24	38. 21	39. 36
40. 25	41. 70	42. 30

2

1. 72	2. 27	3. 63
4. 6	5. 28	6. 32
7. 36	8. 49	9. 30
10. 40	11. 50	12. 21
13. 35	14. 45	15. 54
16. 72	17. 63	18. 36
19. 0	20. 32	21. 70
22. 24	23. 80	24. 0
25. 20	26. 40	27. 18
28. 42	29. 24	30. 24
31. 54	32. 16	33. 35
34. 0	35. 30	36. 14
37. 56	38. 42	39. 81
40. 48	41. 36	42. 4

24

Exercise 14

1 a. $1 \times 16, 16 \times 1, 2 \times 8, 8 \times 2, 4 \times 4$

Factors are : $1, 2, 4, 8$ and 16

b. $1 \times 12, 12 \times 1, 2 \times 6, 6 \times 2, 3 \times 4, 4 \times 3$
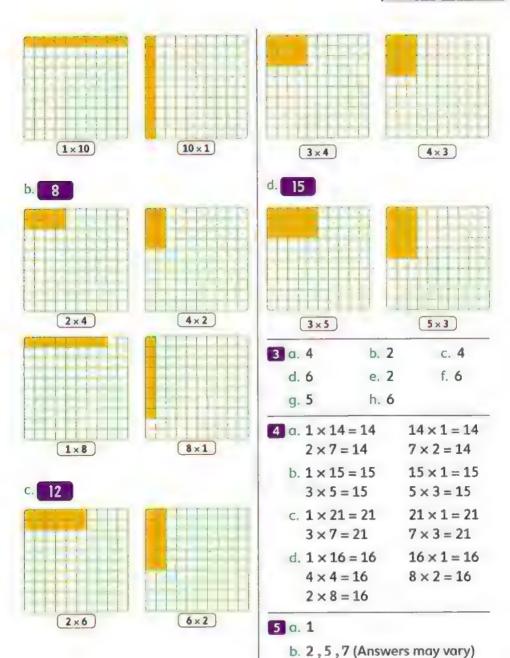
Factors are : $1, 2, 3, 4, 6$ and 12

c. $1 \times 18, 18 \times 1, 2 \times 9, 9 \times 2, 3 \times 6, 6 \times 3$

Factors are : $1, 2, 3, 6, 9$ and 18

d. $1 \times 20, 20 \times 1, 2 \times 10, 10 \times 2, 4 \times 5, 5 \times 4$

Factors are : $1, 2, 4, 5, 10$ and 20

e. $1 \times 6, 6 \times 1, 2 \times 3, 3 \times 2$

Factors are : $1, 2, 3$ and 6

f. $1 \times 15, 15 \times 1, 3 \times 5, 5 \times 3$

Factors are : $1, 3, 5$ and 15

g. $1 \times 9, 9 \times 1, 3 \times 3$

Factors are : $1, 3$ and 9

h. $1 \times 7, 7 \times 1$

Factors are : 1 and 7

2

a. **10**

| 2×5 | 5×2 |

1×10

10×1

3×4

4×3

b. **8**

2×4

4×2

1×8

8×1

c. **12**

2×6

6×2

d. **15**

3×5

5×3

3 a. 4   b. 2   c. 4

d. 6   e. 2   f. 6

g. 5   h. 6

4 a. $1 \times 14 = 14$ $14 \times 1 = 14$

$2 \times 7 = 14$ $7 \times 2 = 14$

b. $1 \times 15 = 15$ $15 \times 1 = 15$

$3 \times 5 = 15$ $5 \times 3 = 15$

c. $1 \times 21 = 21$ $21 \times 1 = 21$

$3 \times 7 = 21$ $7 \times 3 = 21$

d. $1 \times 16 = 16$ $16 \times 1 = 16$

$4 \times 4 = 16$ $8 \times 2 = 16$

$2 \times 8 = 16$

5 a. 1

b. 2 , 5 , 7 (Answers may vary)

Exercise 15

1 a. 04 : 55   b. 10 : 10

c. 05 : 40   d. 09 : 20

e. 10 : 05   f. 11 : 35

g. 04 : 30   h. 11 : 50

2 a. 07 : 15

It's quarter past 7

b. 02 : 30

It's half past 2

c. 06 : 00

It's 6 o'clock

d. 04 : 45
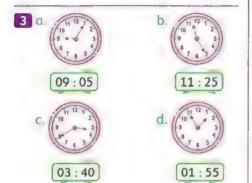
It's quarter to 5

e. 09 : 15

It's quarter past 9

f. 12 : 00

It's 12 o'clock

3 a. 09 : 05   b. 11 : 25

c. 03 : 40   d. 01 : 55

e. 06 : 10   f. 10 : 20

g. 08 : 50   h. 04 : 35

4 a.

After 10 minutes

05 : 00   05 : 10

b.

After 35 minutes

01 : 00   01 : 35

c.

After 25 minutes

10 : 00   10 : 25

d.

After
50 minutes

08 : 00   08 : 50

e.

After
5 minutes

It's 3 o'clock   03 : 05

f.

After
40 minutes

It's 6 o'clock   06 : 40

g.

After
30 minutes

It's 11 o'clock   11 : 30

h.

After
60 minutes

It's 4 o'clock   05 : 00

5 a. 2   b. 5   c. 8
d. 1   e. 12

6 a.

Elapsed time : 55 minutes

b.

Elapsed time : 15 minutes

c.

Elapsed time : 40 minutes

d.

Elapsed time : 20 minutes

e. 02 : 00   2 : 45
Elapsed time : 45 minutes

f. 10 : 00   10 : 10
Elapsed time : 10 minutes

g. 11 : 00   11 : 05
Elapsed time : 5 minutes

h. 03 : 00   4 : 00
Elapsed time : 1 hour

7 a. 45   b. 35   c. 30

    d. 20   e. 25

8 a.   b.

    c.   d.

9

04 : 45

Start   Finish

Exercise 16

1 a. 3 ,

9

3   3   3

b. 3 ,

6

3   3

c. 4 ,

12

4   4   4

d. 4 ,

16

4   4   4   4

e. 2 ,

8

2   2   2   2

f. 4 ,

20

4   4   4   4   4

g. 3 ,

15

3   3   3   3   3

h. 6 ,

36

6   6   6   6   6   6

2

b.

2 in each group.

c.

7 in each group.

d.
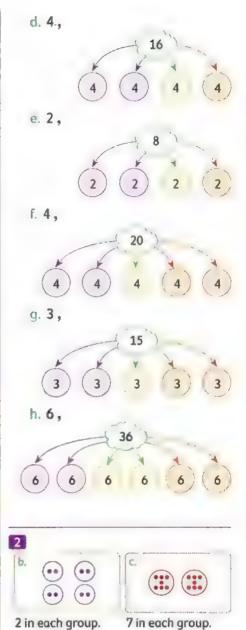

1 in each group.

3 a. 6 eggs in each plate.

b. 6 cats.

c. 7 stamps in each page.

d. 6 ibis   e. 4 jackals

f. 4 rows.   g. 5 crocodiles

h. 9 horses.

4 No, he can not divide 13 into 2 equal groups.

Exercise 17

1 a. 4   b. 2   c. 5

d. 4   e. 8   f. 10

g. 4   h. 3   i. 6

j. 7   k. 4   l. 8

m. 9   n. 8   o. 1

p. 7   q. 7   r. 6

s. 1   t. 10   u. 4

v. 4   w. 4   x. 9

y. 7   z. 6

2 a. 8   b. 9   c. 9

d. 10   e. 3   f. 1

g. 7   h. 5   i. 2

j. 7

3 a. =   b. <   c. >

d. =   e. >   f. >

g. =   h. <

4 a. ✓   b. ✗   c. ✗

d. ✓   e. ✗   f. ✓

g. ✓   h. ✗   i. ✗

j. ✗   k. ✓   l. ✗

5 a. 3 , 3   b. 7 , 7   c. 9 , 9

d. 3 , 3   e. 9 , 9   f. 8 , 8

6 a. 12   b. 30   c. 15

d. 4   e. 8   f. 9

g. 5   h. 7   i. 9

7 b. $2 \times 7 = 14$

$7 \times 2 = 14$

$14 \div 7 = 2$

$14 \div 2 = 7$

c. $3 \times 9 = 27$

$9 \times 3 = 27$

$27 \div 3 = 9$

$27 \div 9 = 3$

d. $4 \times 6 = 24$

$6 \times 4 = 24$

$24 \div 4 = 6$

$24 \div 6 = 4$

8 a. $9 \times 4 = 36$

$36 \div 4 = 9$

$36 \div 9 = 4$

b. $5 \times 8 = 40$
$8 \times 5 = 40$
$40 \div 8 = 5$

c. $3 \times 6 = 18$
$18 \div 3 = 6$
$18 \div 6 = 3$

d. $8 \times 2 = 16$
$16 \div 2 = 8$
$16 \div 8 = 2$

e. $1 \times 13 = 13$
$13 \times 1 = 13$
$13 \div 13 = 1$

f. $2 \times 7 = 14$
$7 \times 2 = 14$
$14 \div 7 = 2$

10 a. $36 \div 6 = 6$ b. $9 \times 2 = 18$
c. $24 \div 3 = 8$

11

a.

4	9	36

$4 \times 9 = 36$
$9 \times 4 = 36$
$36 \div 4 = 9$
$36 \div 9 = 4$

b.

②	⑤	⑩

$2 \times 5 = 10$
$5 \times 2 = 10$
$10 \div 2 = 5$
$10 \div 5 = 2$

9

a. $5 \times 6 = 30$
$6 \times 5 = 30$
$30 \div 5 = 6$
$30 \div 6 = 5$⑤   6

b. $4 \times 6 = 24$
$6 \times 4 = 24$ ㉔
$24 \div 4 = 6$
$24 \div 6 = 4$⑥   4

c. $3 \times 8 = 24$
$8 \times 3 = 24$ ㉔
$24 \div 3 = 8$
$24 \div 8 = 3$⑧   ⑧

d. $3 \times 6 = 18$
$6 \times 3 = 18$ ⑱
$18 \div 3 = 6$
$18 \div 6 = 3$③   6

e. $4 \times 7 = 28$
$7 \times 4 = 28$ ㉘
$28 \div 4 = 7$
$28 \div 7 = 4$④   7

f. $2 \times 4 = 8$
$4 \times 2 = 8$ ⑧
$8 \div 2 = 4$
$8 \div 4 = 2$②   4

g. $3 \times 7 = 21$
$7 \times 3 = 21$ ㉑
$21 \div 3 = 7$
$21 \div 7 = 3$⑦   3

h. $3 \times 10 = 30$
$10 \times 3 = 30$ ㉚
$30 \div 3 = 10$
$30 \div 10 = 3$③   10

Answers of Chapter 4

Exercise 18

1
a. ✓   b. ✓   c. ✓
d. ✗   e. ✗   f. ✓
g. ✗   h. ✗   i. ✓
j. ✓   k. ✗   l. ✗
m. ✗   n. ✓   o. ✗

2 Answers may vary

a. ▲   b. ▱

c. ⬟   d. ⬡

3
a. ⟶ Octagon
b. ⟶ Triangle
c. ⟶ Parallelogram
d. ⟶ Hexagon
e. ⟶ Pentagon
f. ⟶ Trapezium

4
a. Parallelogram   b. Triangle
c. Pentagon   d. Rectangle
e. Square   f. Trapezium
g. Hexagon   h. Circle
i. Rhombus

5

Shape	Name	Attributes		Polygon
		Sides	Vertices	
⚠	Triangle	3	3	polygon
WELCOME	Trapezium	4	4	polygon

ONE WAY	Rectangle	4	4	polygon
🚸	Pentagon	5	5	polygon
P	Square	4	4	polygon
🚫	Circle	0	0	not a polygon
STOP	Hexagon	6	6	polygon
	Rhombus	4	4	polygon

6
a. ✗   b. ✓   c. ✗
d. ✓   e. ✓   f. ✗
g. ✓   h. ✓

7
a. 3 , 3   b. 8   c. 5 , 5
d. 7   e. hexagon
f. heptagon

Exercise 19

1

(×) ▭ ▱ (×)
□ ⬟⟋ (×) (×) ◇

• Examples of parallelogram : rectangle , square , rhombus

2
a. Rectangle   b. Rhombus
c. Square   d. Trapezium
e. Parallelogram   f. Trapezium

3 a. 4   b. 2
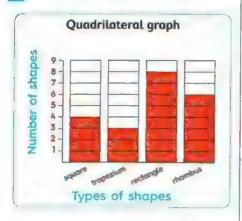
c. 4   d. 4

e. 1   f. 4

4 a. trapezium

b. quadrilateral

c. square

d. rhombus

e. rectangle

5 a. ✓   b. ✗   c. ✓

d. ✗   e. ✓   f. ✗

g. ✗   h. ✓   i. ✓

j. ✓

6

Quadrilateral graph

a. Rectangle

b. Trapezium

c. 18

Exercise 20
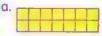
Exercise on calculating area

1 a. 9   b. 10   c. 14

d. 11   e. 14   f. 10

g. 30   h. 21   i. 14

j. $2 \times 5 = 10$

k. $3 \times 4 = 12$

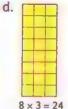l. $3 \times 6 = 18$

2 a. 20   b. 18   c. 25

d. 21   e. 21   f. 7

g. 70   h. 32   i. 40

3 a. $7 \times 6 = 42$

b. $9 \times 8 = 72$

c. $4 \times 5 = 20$

d. $7 \times 10 = 70$

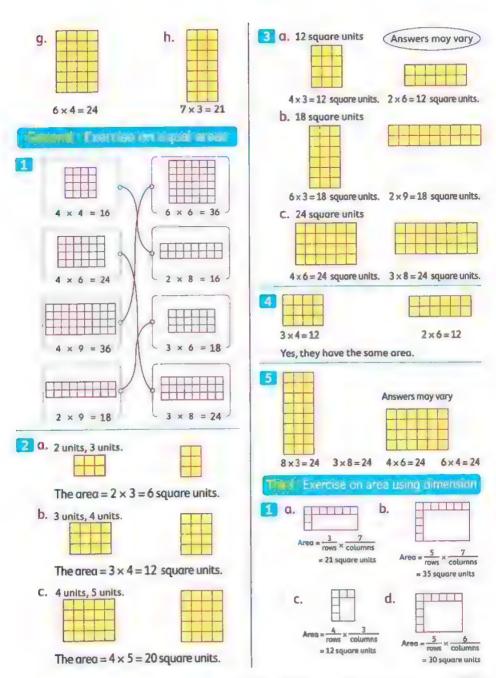**4** a.

$2 \times 7 = 14$

b.

$4 \times 5 = 20$

c.

$4 \times 2 = 8$

d.

$8 \times 3 = 24$

e.

$6 \times 1 = 6$

f.

$5 \times 6 = 30$

g.

$6 \times 4 = 24$

h.

$7 \times 3 = 21$

Exercise on equal areas

1

$4 \times 4 = 16$

$6 \times 6 = 36$

$4 \times 6 = 24$

$2 \times 8 = 16$

$4 \times 9 = 36$

$3 \times 6 = 18$

$2 \times 9 = 18$

$3 \times 8 = 24$

2 a. 2 units, 3 units.

The area $= 2 \times 3 = 6$ square units.

b. 3 units, 4 units.

The area $= 3 \times 4 = 12$ square units.

c. 4 units, 5 units.

The area $= 4 \times 5 = 20$ square units.

3 a. 12 square units

Answers may vary

$4 \times 3 = 12$ square units. $2 \times 6 = 12$ square units.

b. 18 square units

$6 \times 3 = 18$ square units. $2 \times 9 = 18$ square units.

c. 24 square units

$4 \times 6 = 24$ square units. $3 \times 8 = 24$ square units.

4

$3 \times 4 = 12$ $2 \times 6 = 12$

Yes, they have the same area.

5

Answers may vary

$8 \times 3 = 24$ $3 \times 8 = 24$ $4 \times 6 = 24$ $6 \times 4 = 24$

Exercise on area using dimension

1 a.

$Area = \frac{3}{rows} \times \frac{7}{columns}$
$= 21$ square units

b.

$Area = \frac{5}{rows} \times \frac{7}{columns}$
$= 35$ square units

c.

$Area = \frac{4}{rows} \times \frac{3}{columns}$
$= 12$ square units

d.

$Area = \frac{5}{rows} \times \frac{6}{columns}$
$= 30$ square units

e.   f.

Area = $\dfrac{4}{rows} \times \dfrac{4}{columns}$
= 16 square units

Area = $\dfrac{7}{rows} \times \dfrac{3}{columns}$
= 21 square units

2 $3 \times 6 = 18$ square cm

Exercise 21

1 a.   b.

c.   d.

e.

2 a. $8 \times \boxed{7} = (\boxed{8} \times \boxed{5}) + (\boxed{8} \times \boxed{2})$

b. $\boxed{6} \times \boxed{9} = (\boxed{6} \times \boxed{5}) + (\boxed{6} \times \boxed{4})$

c. $\boxed{7} \times \boxed{10} = (\boxed{7} \times \boxed{7}) + (\boxed{7} \times \boxed{3})$

d. $\boxed{9} \times \boxed{8} = (\boxed{9} \times \boxed{4}) + (\boxed{9} \times \boxed{4})$

e. $\boxed{5} \times \boxed{11} = (\boxed{5} \times \boxed{1}) + (\boxed{5} \times \boxed{10})$

f. $\boxed{4} \times \boxed{7} = (\boxed{4} \times \boxed{6}) + (\boxed{4} \times \boxed{1})$

3

a.   b.

$8 \times 8 = (8 \times 5) + (8 \times 3)$ $7 \times 9 = (7 \times 2) + (7 \times 7)$

c.   d.

$5 \times 6 = (5 \times 4) + (5 \times 2)$ $6 \times 7 = (6 \times 1) + (6 \times 6)$

e.   f.

$6 \times 7 = (6 \times 3) + (6 \times 4)$ $8 \times 9 = (8 \times 4) + (8 \times 5)$

4   Answers may vary

a.   b.

$\boxed{6} \times \boxed{3} = \boxed{18}$ $\boxed{5} \times \boxed{6} = \boxed{30}$
$\boxed{6} \times \boxed{4} = \boxed{24}$ $\boxed{5} \times \boxed{4} = \boxed{20}$
$\boxed{18} + \boxed{24} = \boxed{42}$ $\boxed{30} + \boxed{20} = \boxed{50}$
$6 \times 7 = \boxed{42}$ $5 \times 10 = \boxed{50}$
$6 \times 7 = (6 \times 3) + (6 \times 4)$ $5 \times 10 = (5 \times 6) + (5 \times 4)$

c.   d.

$\boxed{3} \times \boxed{8} = \boxed{24}$ $\boxed{7} \times \boxed{7} = \boxed{49}$
$\boxed{3} \times \boxed{5} = \boxed{15}$ $\boxed{7} \times \boxed{2} = \boxed{14}$
$\boxed{24} + \boxed{15} = \boxed{39}$ $\boxed{49} + \boxed{14} = \boxed{63}$
$3 \times 13 = \boxed{39}$ $7 \times 9 = \boxed{63}$
$3 \times 13 = (3 \times 8) + (3 \times 5)$ $7 \times 9 = (7 \times 7) + (7 \times 2)$

e.   f.

$\boxed{8} \times \boxed{1} = \boxed{8}$ $\boxed{9} \times \boxed{2} = \boxed{18}$
$\boxed{8} \times \boxed{1} = \boxed{8}$ $\boxed{9} \times \boxed{4} = \boxed{36}$
$\boxed{8} + \boxed{8} = \boxed{16}$ $\boxed{18} + \boxed{36} = \boxed{54}$
$8 \times 2 = \boxed{16}$ $9 \times 6 = \boxed{54}$
$8 \times 2 = (8 \times 1) + (8 \times 1)$ $9 \times 6 = (9 \times 2) + (9 \times 4)$

g.

h.

$7 \times 3 = 21$
$7 \times 5 = 35$
$21 + 35 = 56$
$7 \times 8 = 56$
$7 \times 8 = (7 \times 3) + (7 \times 5)$

$8 \times 5 = 40$
$8 \times 4 = 32$
$40 + 32 = 72$
$8 \times 9 = 72$
$8 \times 9 = (8 \times 5) + (8 \times 4)$

5 a. 3   b. 5

c. 1   d. 6

e. 9 , 5   f. 4 , 4

g. 5 , 10   h. 10

i. 8 , 10   j. 3 , 1

k. 7 , 5   l. 5 , 7

6 a. $6 \times 7 = (6 \times 2) + (6 \times 5)$
$= 12 + 30$
$= 42$
b. $9 \times 8 = (9 \times 4) + (9 \times 4)$
$= 36 + 36$
$= 72$
c. $4 \times 9 = (4 \times 4) + (4 \times 5)$
$= 16 + 20$
$= 36$
d. $12 \times 2 = (12 \times 1) + (1 \times 12)$
$= 12 + 12$
$= 24$

e. $10 \times 11 = (10 \times 10) + (10 \times 1)$
$= 100 + 10$
$= 110$
f. $5 \times 7 = (5 \times 6) + (5 \times 1)$
$= 30 + 5$
$= 35$
g. $9 \times 6 = (9 \times 3) + (9 \times 3)$
$= 27 + 27$
$= 54$
h. $3 \times 14 = (3 \times 4) + (3 \times 10)$
$= 12 + 30$
$= 42$

7 a. $\longrightarrow$ $(3 \times 7) + (3 \times 3)$

b. $\longrightarrow$ $(7 \times 5) + (7 \times 1)$

c. $\longrightarrow$ $(4 \times 5) + (4 \times 4)$

d. $\longrightarrow$ $(9 \times 10) + (9 \times 3)$

e. $\longrightarrow$ $(6 \times 6) + (6 \times 5)$

8 a. 1   b. 13
c. 4   d. 10
e. 10

Answers of Chapter 5

1

a.
5cm 5cm
5cm
Perimeter = 5 + 5 + 5
= 15 cm
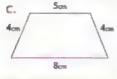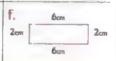
b.
2cm
3cm 3cm
2cm
Perimeter = 2 + 3 + 2 + 3
= 10 cm
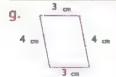
c.
5cm
4cm 4cm
8cm
Perimeter = 5 + 4 + 8 + 4
= 21 cm

d.
5cm
5cm 5cm
5cm
Perimeter = 5 + 5 + 5 + 5
= 20 cm

e.
5cm 3cm
5cm
Perimeter = 3 + 5 + 5
= 13 cm
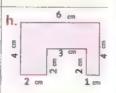
f.
6cm
2cm 2cm
6cm
Perimeter = 6 + 2 + 6 + 2
= 16 cm

g.
3 cm
4 cm 4 cm
3 cm
Perimeter = 3 + 4 + 3 + 4
= 14 cm
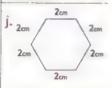
h.
6 cm
4 cm 3 cm 4 cm
2 cm 2 cm
2 cm 1 cm
Perimeter = 6 + 4 + 1 + 2
+ 3 + 2 + 2 + 4 = 24 cm

i.
3cm 3cm
3cm 3cm
Perimeter = 3 + 3 + 3 + 3
= 12 cm

j.
2cm
2cm 2cm
2cm 2cm
2cm
Perimeter = 2 + 2 + 2 + 2
+ 2 + 2 = 12 cm

2
a. Perimeter = 20 cm
   Area = 21 square centimeters
b. Perimeter = 14 cm
   Area = 6 square centimeters
c. Perimeter = 12 cm
   Area = 8 square centimeters
d. Perimeter = 12 cm
   Area = 9 square centimeters
e. Perimeter = 16 cm
   Area = 12 square centimeters
f. Perimeter = 14 cm
   Area = 9 square centimeters
g. Perimeter = 18 cm
   Area = 8 square centimeters
h. Perimeter = 20 cm
   Area = 10 square centimeters
i. Perimeter = 20 cm
   Area = 16 square centimeters
j. Perimeter = 22 cm
   Area = 14 square centimeters
k. Perimeter = 16 cm
   Area = 12 square centimeters
l. Perimeter = 20 cm
   Area = 13 square centimeters

3
a. Perimeter = 14 meters
   Area = 12 square meters
b. Perimeter = 16 meters
   Area = 15 square meters
c. Perimeter = 22 meters
   Area = 28 square meters

d. Perimeter = 24 meters
   Area = 27 square meters

e. Perimeter = 26 meters
   Area = 30 square meters

f. Perimeter = 18 meters
   Area = 20 square meters

g. 120 meters

h. 132 square meters

4 a. 48

b. 48

c. No, the area of the warehouse
   = 2 × 6 = 12 square meters
   The area of the garden = 2 × 7
   = 14 square meters

d. Yes, the perimeter of the
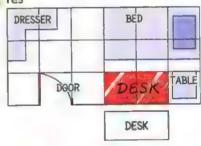   parking = 2 + 6 + 2 + 6
   $\qquad$ = 16 meters

   The perimeter of the
   swimming pool = 2 + 6 + 2 + 6
   $\qquad$ = 16 meters

5

Region	Perimeter In centimeters	Area in square centimeters
Red	18	18
Green	20	25
Blue	12	8
Yellow	22	18

a. Green

b. Blue, Red, Green, Yellow

6 Yes

Exercise

1 a. Area = 3 × 4
   $\qquad$ = 12 square centimeters

b. Area = 5 × 5
   $\qquad$ = 25 square centimeters

c. Area = 3 × 7
   $\qquad$ = 21 square centimeters

d. Area = 2 × 6
   $\qquad$ = 12 square centimeters
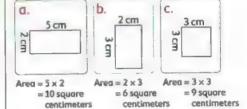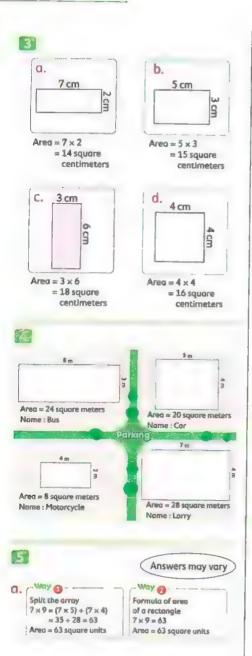
e. Area = 4 × 4
   $\qquad$ = 16 square centimeters
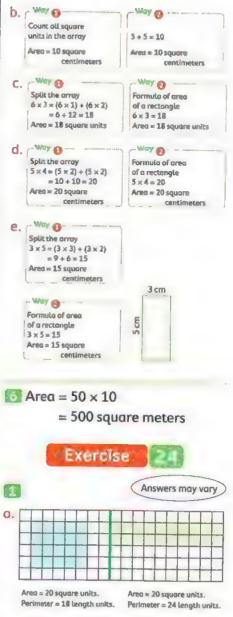
f. Area = 5 × 6
   $\qquad$ = 30 square centimeters

2

a. 5 cm, 2 cm
Area = 5 × 2
= 10 square centimeters

b. 2 cm, 3 cm
Area = 2 × 3
= 6 square centimeters

c. 3 cm, 3 cm
Area = 3 × 3
= 9 square centimeters

3

a.

7 cm
2 cm

Area = 7 × 2
= 14 square
centimeters

b.

5 cm
3 cm

Area = 5 × 3
= 15 square
centimeters

c.

3 cm
6 cm

Area = 3 × 6
= 18 square
centimeters

d.

4 cm
4 cm

Area = 4 × 4
= 16 square
centimeters

4

8 m
3 m

Area = 24 square meters
Name : Bus

5 m
4 m

Area = 20 square meters
Name : Car

Parking

4 m
3 m

Area = 8 square meters
Name : Motorcycle

7 m
4 m

Area = 28 square meters
Name : Lorry

5

Answers may vary

a.

Way **1**
Split the array
7 × 9 = (7 × 5) + (7 × 4)
= 35 + 28 = 63
Area = 63 square units

Way **2**
Formula of area
of a rectangle
7 × 9 = 63
Area = 63 square units

b.

Way **1**
Count all square
units in the array
Area = 10 square
centimeters

Way **2**
5 + 5 = 10
Area = 10 square
centimeters

c.

Way **1**
Split the array
6 × 3 = (6 × 1) + (6 × 2)
= 6 + 12 = 18
Area = 18 square units

Way **2**
Formula of area
of a rectangle
6 × 3 = 18
Area = 18 square units

d.

Way **1**
Split the array
5 × 4 = (5 × 2) + (5 × 2)
= 10 + 10 = 20
Area = 20 square
centimeters

Way **2**
Formula of area
of a rectangle
5 × 4 = 20
Area = 20 square
centimeters

e.

Way **1**
Split the array
3 × 5 = (3 × 3) + (3 × 2)
= 9 + 6 = 15
Area = 15 square
centimeters

Way **2**
Formula of area
of a rectangle
3 × 5 = 15
Area = 15 square
centimeters

3 cm
5 cm

6 Area = 50 × 10
= 500 square meters

Exercise **24**

1

Answers may vary

a.

Area = 20 square units.
Perimeter = 18 length units.

Area = 20 square units.
Perimeter = 24 length units.

b.

Area = 24 square units.
Perimeter = 20 length units.

Area = 24 square units.
Perimeter = 22 length units.

c.

Area = 8 square units.
Perimeter = 12 length units.

Area = 8 square units.
Perimeter = 18 length units.

2

Answers may vary

a.

Area = 12 square units.
Perimeter = 16 length units.

Area = 16 square units.
Perimeter = 16 length units.

b.

Area = 12 square units.
Perimeter = 14 length units.

Area = 6 square units.
Perimeter = 14 length units.

c.

Area = 9 square units.
Perimeter = 20 length units.

Area = 24 square units.
Perimeter = 20 length units.

3

Draw a rectangle with dimensions 3 cm and 2 cm	Draw a rectangle with dimensions 6 cm and 1 cm
Side lengths are 2 cm, 3 cm Perimeter = 10 centimeters	Side lengths are 1 cm, 6 cm Perimeter = 14 centimeters

The perimeter of the second rectangle is greater.

4
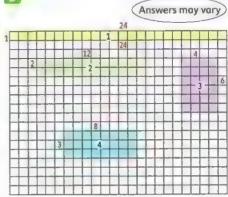
Answer may vary

Draw a rectangle with dimensions 6 cm and 4 cm	Draw a rectangle with dimensions 7 cm and 3 cm
Side lengths are 4 cm, 6 cm Area = 24 square cm	Side lengths are 7 cm, 3 cm Area = 21 square cm
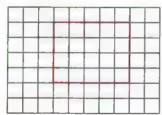
The area of first rectangle is greater.

5

Answers may vary

	Width (length units)	Length (length units)	Area (square units)	Perimeter (length units)
Rectangle ①	1	24	24	50
Rectangle ②	2	12	24	28
Rectangle ③	4	6	24	20
Rectangle ④	8	3	24	22

6 4 cm , 5 cm

Exercise

1 a. The area of the pen
= 3 × 2 = 6 square meters

b. The number of tiles
= 7 × 6 = 42 tiles.

c. The perimeter
= 20 + 12 + 20 + 12 = 64 cm

d. The length of the fence
= 8 + 3 + 8 + 3 = 22 meters.

e. The area of the rug
= 3 × 2 = 6 square meters

f. The area of the party banner
= 7 × 2 = 14 square meters

g. The length of the border
= 45 + 45 + 45 + 45
= 180 centimeters.

h. The area of the wall
= 6 × 3 = 18 square meters

i. False.

2 The perimeter of Kareem's school playground
= 75 + 40 + 75 + 40 = 230 m

The perimeter of Ali's school playground
= 90 + 30 + 90 + 30 = 240 m

Ali jogged longer.

Exercise 26

1 a. 12 , 120   b. 10 , 100

c. 18 , 180   d. 28 , 280

e. 24 , 240

2 a. (4 × 5) × 10 = 20 × 10 = 200

b. (8 × 2) × 10 = 16 × 10 = 160

c. (7 × 7) × 10 = 49 × 10 = 490

d. (9 × 9) × 10 = 81 × 10 = 810

e. (3 × 6) × 10 = 18 × 10 = 180

f. $(4 \times 9) \times 10 = 36 \times 10 = 360$

g. $(6 \times 2) \times 10 = 12 \times 10 = 120$

h. $(7 \times 4) \times 10 = 28 \times 10 = 280$

3

a. 150	b. 120	c. 320
d. 100	e. 160	f. 210
g. 540	h. 280	i. 160
j. 720	k. 180	l. 560
m. 180	n. 250	o. 100

4

a. 210	b. 4	c. 150
d. 7	e. 0	f. 320
g. 40	h. 80	

5

a. 60	b. 200	c. 450
d. 560	e. 2	f. 7
g. 2	h. 2	i. 3
j. 7	k. 3	l. 1
m. 50	n. 2	o. 30
p. 5	q. 90	r. 3

6 600

41

Answers of Chapter 6

1 a. 30 , 300 , 3,000

b. 6 , 60 , 600 , 6,000

c. 24 , 240 , 2,400 , 24,000

d. 28 , 280 , 2,800 , 28,000

e. 30 , 300 , 3,000 , 30,000

f. 35 , 350 , 3,500 , 35,000

2 a. $(3 \times 9) \times 10 = 270$

b. $(4 \times 8) \times 10 = 320$

c. $(9 \times 2) \times 10 = 180$

d. $(6 \times 3) \times 10 = 180$

e. $(8 \times 5) \times 10 = 400$

f. $(7 \times 3) \times 10 = 210$

g. $(6 \times 7) \times 10 = 420$

h. $(5 \times 4) \times 10 = 200$

3 a. 120   b. 100   c. 240

d. 210   e. 250   f. 320

g. 4,200   h. 2,700   i. 500

j. 600   k. 20,000

l. 18,000   m. 18,000

n. 40,000   o. 56,000

4 a. ⟶ 80

b. ⟶ 180

c. ⟶ 350

d. ⟶ 240

5 a. 50   b. 7   c. 9

d. 2   e. 4   f. 3,000

g. 200   h. 4,000

6 a. $3 \times 40 = 120$

b. $4 \times 60 = 240$

c. $5 \times 30 = 150$

d. $3 \times 40 = 120$ pounds.

e. $4 \times 60 = 240$ kilograms.

7 Yes, he is correct.

$6 \times 60 = (6 \times 6) \times 10$

$= 36 \times 10 = 360$

1 a. 27   b. 18   c. 54   d. 36

e. 45   f. 72   g. 9   h. 0

i. 63   j. 90

2 a. ⟶ 63

b. ⟶ 9×8

c. ⟶ 36

d. ⟶ 9×5

3 a. 90   b. 45 , 54

c. 63 , 72   d. 36 , 45

e. 18 , 9   f. 27 , 36

4 a. 4   b. 9   c. 2   d. 3

e. 1   f. 6   g. 8   h. 7

i. 0   j. 5   k. 10   l. 3

5 a. 180   b. 450
c. 2,700   d. 5,400
e. 36,000   f. 72,000

6 a. =   b. >   c. 6   d. 3
e. 50   f. 54   g. 9

Exercise 29

1 a. ⟶ 4 × 1   b. ⟶ 4 × 3
c. ⟶ 2 × 0   d. ⟶ 4 + 3
e. ⟶ 2 × 4

2 a. 5   b. 6   c. 72   d. 4
e. 10   f. 0   g. 15   h. 24
i. 11   j. 12   k. 20   l. 0
m. 15   n. 8   o. 40   p. 10
q. 20   r. 11   s. 1   t. 14
u. 7   v. 81   w. 0   x. 10
y. 9   z. 2

3 a. Multiply
What Amgad paid =
3 × 5 = 15 pounds
b. Add
The number of books =
4 + 5 = 9 books
c. Multiply
The number of pencils =
5 × 6 = 30 pencils

4 a. 7   b. 0   c. 1
d. 1   e. 1   f. 9
g. 6   h. 7   i. 8
j. 0   k. 1   l. 12

5 a. 0   b. 1   c. 2   d. 3
e. 5   f. 1   g. 0   h. 12
i. 7   j. 2   k. 9

6 a. +   b. ×   c. +   d. +
e. ×   f. ×

Exercise 30

1 a. 3,000 + 500 + 9
b. 321,931   c. 6,000 , Thousands
d. 56,342   e. 4 , 3 , 2 , 7
f. Ten thousands
g. Hundred thousands , 100,000

2 a. 3,000   b. 106,725
c. Ten thousands
d. 531,074   e. 74,005
f. 352,950   g. Thousands

3 a. 30   b. 20   c. 4
d. 60   e. 200,000   f. 10

4 a. <   b. >   c. <   d. =
e. >   f. >   g. <   h. >
i. =   j. <

5 a. The order is : 5,021 , 5,102 ,
5,201 , 5,210
b. The order is : 5,099 , 55,318 ,
55,418 , 505,720 , 550,941

6 a. 409,009 , 30,199 , 4,099 , 3,109 , 499

b. The order is : 248,672 , 248,671 , 15,378 , 15,368 , 9,725

7 a. 70,000   (Answers may vary)
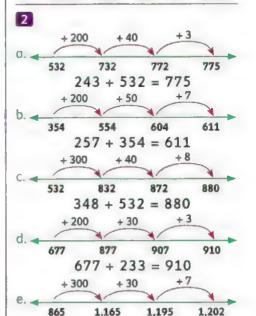
b. 800,000 + 30,000 + 5,000 + 400 + 60 + 9

c. fifty-eight thousand , seventy-two

d. hundred thousands

e. 3,000 hundreds or 30,000 tens

f. <   g. >   h. 80 thousands

i. 5,101 , 10,050 , 50,011 , 501,001 , 510,001

8 324, ⓪ 65 , 19 ⓪ , 654

Exercise 31
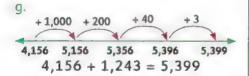
1 a. 300 + 20 + 8
400 + 60 + 1

700 + 80 + 9 = 789

b. 100 + 40 + 2
300 + 20 + 5

400 + 60 + 7 = 467

c. 600 + 10 + 5
300 + 20 + 4

900 + 30 + 9 = 939

---

d. 400 + 80 + 3
200 + 1

600 + 80 + 4 = 684

e. 800 + 20 + 3
200 + 60 + 2

1,000 + 80 + 5 = 1,085

f. 3,000 + 100 + 20 + 5
4,000 + 500 + 10 + 9

7,000 + 600 + 30 + 14 = 7,644

g. 7,000 + 200 + 10
2,000 + 300 + 20 + 5

9,000 + 500 + 30 + 5 = 9,535

2

a.
+ 200   + 40   + 3
532   732   772   775
243 + 532 = 775

b.
+ 200   + 50   + 7
354   554   604   611
257 + 354 = 611

c.
+ 300   + 40   + 8
532   832   872   880
348 + 532 = 880

d.
+ 200   + 30   + 3
677   877   907   910
677 + 233 = 910

e.
+ 300   + 30   + 7
865   1,165   1,195   1,202
865 + 337 = 1,202

f.

+ 200   + 70   + 8

2,013   2,213   2,283   2,291

$$2,013 + 278 = 2,291$$

g.

+ 1,000   + 200   + 40   + 3

4,156   5,156   5,356   5,396   5,399

$$4,156 + 1,243 = 5,399$$

3

a. 755	b. 750	c. 946
d. 913	e. 645	f. 906
g. 201	h. 716	i. 7,521
j. 5,623	k. 8,892	l. 7,713
m. 775	n. 791	o. 100
p. 642	q. 8,881	r. 5,852
s. 6,200	t. 11,593	u. 692
v. 5,723		

4

Strategies may vary

a. **First strategy :**

$$100 + 20 + 7$$
$$400 + 20 + 6$$
$$\overline{500 + 40 + 13 = 553}$$

Second strategy :

$$\begin{array}{r} 1 \\ 1\,2\,7 \\ +\ 4\,2\,6 \\ \hline 5\,5\,3 \end{array}$$

b. **First strategy :**

$$300 + 50 + 5$$
$$20 + 5$$
$$\overline{300 + 70 + 10 = 380}$$

Second strategy :

+ 20   + 5

355   375   380

$$355 + 25 = 380$$

c. **First strategy :**

$$\begin{array}{r} 1 \\ 4\,2\,9 \\ +\ 1\,5\,2 \\ \hline 5\,8\,1 \end{array}$$

Second strategy :

$$400 + 20 + 9$$
$$100 + 50 + 2$$
$$\overline{500 + 70 + 11 = 581}$$

5

a. $439 + 116 = 555$

b. $328 + 149 = 477$
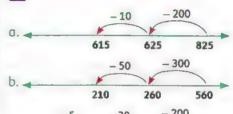
c. $410 + 175 = 585$
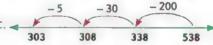
d. $338 + 354 = 692$
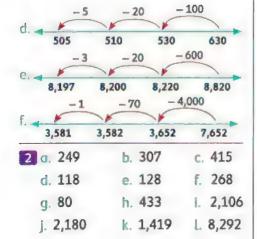
e. $509 + 487 = 996$

f. $408 + 522 = 930$

Exercise 32

1

a.

− 10   − 200

615   625   825

b.

− 50   − 300

210   260   560

c.

− 5   − 30   − 200

303   308   338   538

d.

−5   −20   −100

505   510   530   630

e.

−3   −20   −600

8,197   8,200   8,220   8,820

f.

−1   −70   −4,000

3,581   3,582   3,652   7,652

2 a. 249   b. 307   c. 415

d. 118   e. 128   f. 268

g. 80   h. 433   i. 2,106

j. 2,180   k. 1,419   l. 8,292

m. 259   n. 518   o. 330

p. 315   q. 2,233   r. 504

s. 1,325   t. 8,391   u. 3,381

v. 5,493

3 a. **First strategy :** Strategies may vary

    4 11
   6 5 1
 − · 1 2 3
   5 2 8
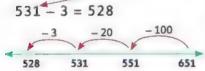
Second strategy :

$123 = 100 + 20 + 3$
$651 − 100 = 551$
$551 − 20 = 531$
$531 − 3 = 528$

−3   −20   −100

528   531   551   651

b. **First strategy :**

$206 = 200 + 6$
$735 − 200 = 535$
$535 − 6 = 529$

−6   −200

529   535   735

Second strategy :

    2 15
   7 3 5
 − 2 0 6
   5 2 9

c. **First strategy :**

    0 12
   1 2 7
 − ? 3 5
     9 2

Second strategy :

$35 = 30 + 5$
$127 − 30 = 97$
$97 − 5 = 92$

−5   −30

92   97   127

d. **First strategy :**

     ·11
   3 11
   4 , 2 1 9
 − 1 , 7 7 7
   2 , 4 4 2

Second strategy :

$1,777 = 1,000 + 700 + 70 + 7$
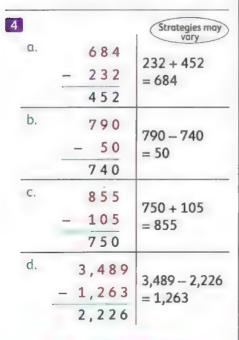
$4,219 - 1,000 = 3,219$

$3,219 - 700 = 2,519$

$2,519 - 70 = 2,449$

$2,449 - 7 = 2,442$

$$-7 \quad -70 \quad -700 \quad -1,000$$

2,442　2,449　2,519　3,219　4,219

4　　Strategies may vary

a.

$$\begin{array}{r} 6\ 8\ 4 \\ -\ \ 2\ 3\ 2 \\ \hline 4\ 5\ 2 \end{array}$$

$232 + 452$
$= 684$

b.

$$\begin{array}{r} 7\ 9\ 0 \\ -\ \ \ 5\ 0 \\ \hline 7\ 4\ 0 \end{array}$$

$790 - 740$
$= 50$

c.

$$\begin{array}{r} 8\ 5\ 5 \\ -\ 1\ 0\ 5 \\ \hline 7\ 5\ 0 \end{array}$$

$750 + 105$
$= 855$

d.

$$\begin{array}{r} 3,4\ 8\ 9 \\ -\ 1,2\ 6\ 3 \\ \hline 2,2\ 2\ 6 \end{array}$$

$3,489 - 2,226$
$= 1,263$

Exercise 33

a. The total amount =

$365 + 475 = 840$ pounds

b. The days left = $365 - 147$

$= 218$ days

c. The number of students =

$1,355 + 1,420 = 2,775$ students

d. The number of pages left =

$370 - 139 = 231$ pages

e. The number of all marbles =

$435 + 435 + 435 = 870 + 435$

$= 1,305$ marbles

f. The number of books on loan

and missing = $525 + 137$

$= 662$ books

The number of books in the

library now = $2,475 - 662$

$= 1,813$ books

g. What Sami paid = $3,250 + 675$

$= 3,925$ L.E.

The money left = $6,000 - 3,925$

$= 2,075$ L.E.

h. What they need =

$4,590 - 2,410 = 2,180$ pounds

Exercise 34

1 a. 1 L　　b. 300 mL　c. 10 mL

d. 40 L　　e. 2 L　　　f. 500 mL

g. 200 mL h. 3 L　　　i. 350 mL

j. 2 L　　　k. 10 mL　　l. 50 L

2 a. 30   b. 60   c. 80

d. 70   e. 90   f. 50

3

a.

30 mL

b.

80 mL

c.

50 mL

d.

200 mL

e.

10 mL

f.

70 mL

4 a.   b.   c.   d.
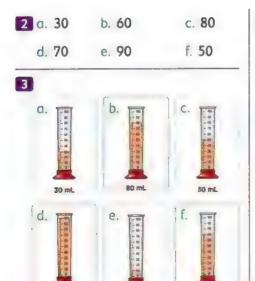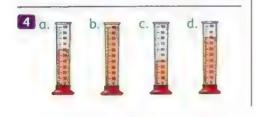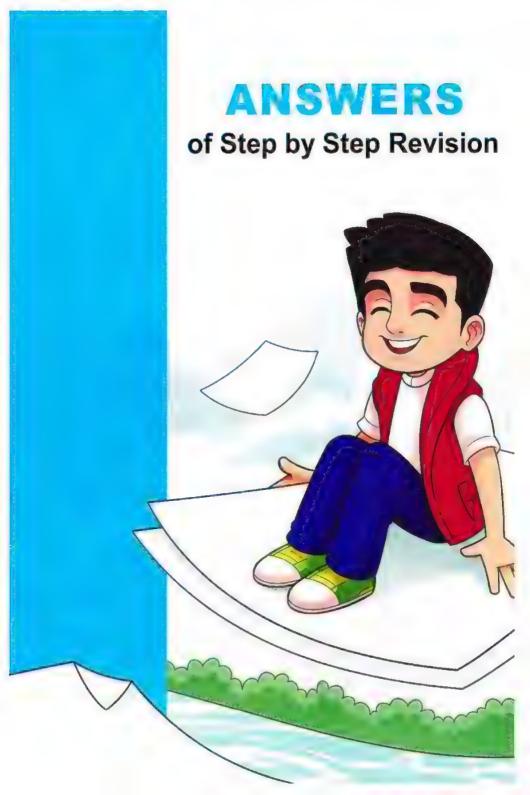
5 a. 5,000   b. 9,000   c. 3

d. 4   e. 25,000   f. 37

g. 10,000   h. 7,000   i. 75

j. 1

6 a. 3,000   b. 14,000   c. 10,000

d. mL   e. L   f. capacity

g. 330 mL   h. 2   i. 70

j. capacity k. L   l. 5,000

m. 3   n. 3   o. L

p. mL

7 1 L = 1,000 mL ,

1,300 − 1,000 = 300 mL

Sameh drank 300 mL more

than 1 L

ANSWERS
of Step by Step Revision

Answers of Worksheets

1 a. − 10   b. + 16   c. − 25

2 a. 53 , 56   +3
    b. 40 , 30   −10
    c. 135 , 140   +5

3 a.   b. **78**

c.   d.

e.   f.

Sheet 2
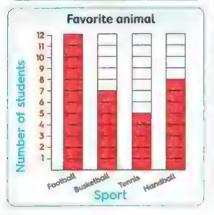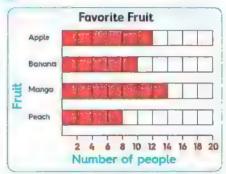
1

Favorite sports

Sport	Tally	Number of students
Football	ЖЖ ЖЖ II	12
Basketball	ЖЖ II	7
Tennis	ЖЖ	5
Handball	ЖЖ III	8

a. **7 students**   b. **Football**
c. **Tennis**

2 a. 26 , 28   +2
    b. 15 , 10   −5
    c. 28 , 35   +7
    d. 33 , 43   +10
    e. 456 , 567   +111
    f. 300 , 100   −200
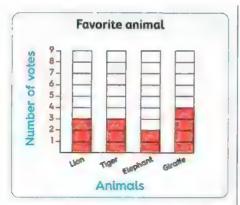
3

a. **10 persons**   b. **26 persons**

4

Favorite animal
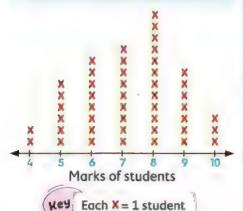
Kind	Tally	Number
Lion	III	3
Tiger	III	3
Elephant	II	2
Giraffe	IIII	4

50

Favorite animal

a. Giraffe   b. Lion , Tiger

c. 2 persons   d. 1 person

Sheet 1

1

Marks of students in math exam

Marks of students

key Each **X** = 1 student

2

Favorite Color	
Color	Tally
Yellow	ЖЖ ЖЖ ЖЖ ЖЖ
Blue	ЖЖ ЖЖ ЖЖ ЖЖ ЖЖ ЖЖ ЖЖ
Red	ЖЖ ЖЖ ЖЖ ЖЖ ЖЖ
Green	ЖЖ ЖЖ ЖЖ
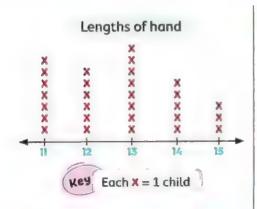
a. 25 students   b. Green

c. Blue   d. 40 students

3 a. 4 children   b. 5 children

c. 5 children   d. 7 children

4 a. 10 children   b. Saturn

c. 7 children   d. 3 children

5 a. 31 , 28   b. 24 , 30

c. 39 , 49   d. 10 , 15

e. f.

g.

Sheet 4

1 a. 7 , 70   b. 2   c. 4

d. 22   e. 7,70

2 a. 3   b. 200   c. cm

d. m   e. <

3

Length of hand		
Length	Tally	Number
11 cm	ЖЖ II	7
12 cm	ЖЖ I	6
13 cm	ЖЖ III	8
14 cm	ЖЖ	5
15 cm	III	3

51

Lengths of hand

Key: Each X = 1 child

Assessment - Chapter 1

1 a. 50   b. 2 , 50

c. 2   d. 45 , 44

2 a. 3   b. 38

c. 2   d. 5

3 a. ✗   b. ✓   c. ✓   d. ✗
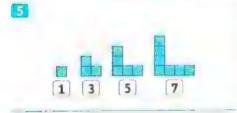
4 The order is : 77 cm , 70 cm ,
77 mm , 70 mm

5

6 a. >   b. >

c. <   d. <

7

Marks of students in an exam

Number of students

Key: Each X = 1 student
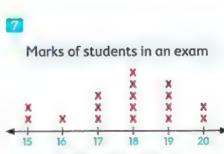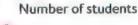
8

Saved coins		
Day	**Tally**	**Number**
Sunday	|||	3
Monday	ⅢⅠ	5
Tuesday	ⅢⅡ III	8
Wednesday	ⅢⅠ I	6

Saved coins

Sheet 5

1 a. 921,458

b. 900,000 + 20,000 + 1,000
+ 400 + 50 + 8

c. Nine hundred twenty-one thousand, four hundred fifty-eight.

2 The order is : 978 , 4,792 , 7,563 , 8,460

3 a. 9,730   b. 3,079

4 a. 7,038   b. 500
c. 3,206   d. Thousands
e. 30   f. 3
g. 120   h. 8

Sheet 6

1 a. Ten thousands   b. 0
c. 304,789   d. 750,906
e. 48

2 a. 7,400   b. ◆ ■
c. 642,713   d. 7,000

3 a. <   b. >   c. <
d. >   e. >   f. =

4 a. ✗   b. ✗   c. ✓
d. ✗   e. ✓

Sheet 7

1 a. 3 , 4 , 12   b. 4 , 2 , 8

2 a.
x	x
x	x
x	x

b.
| x | x | x |
| x | x | x |

3 a. Ten thousands   b. <
c. 987, 540   d. 3
e. 800, 000

4 a. 300,000 + 10,000 + 4,000
+ 50 + 2

b. 70,000 + 2,000

c. 30,000 + 7,000 + 500 + 60 + 1

d. 10,000 + 4,000 + 30 + 1

Sheet 8

1 a. ✓   b. ✓   c. ✗
d. ✓   e. ✗   f. ✗

2 a.
x	x	x	x
x	x	x	x
x	x	x	x

$3 \times 4 = 12$

b.
x	x
x	x
x	x
x	x
x	x

$2 \times 5 = 10$

c.
x	x	x
x	x	x
x	x	x
x	x	x
x	x	x
x	x	x

$6 \times 3 = 18$

3 a. ⟶ Ten thousands
b. ⟶ Hundred thousands
c. ⟶ Ones
d. ⟶ Hundreds
e. ⟶ Thousands
f. ⟶ Tens

Sheet 9

1 a.

$(3) \times (2) = (6)$ $(2) \times (3) = (6)$

b.

$(4) \times (3) = (12)$ $(3) \times (4) = (12)$

2 a.

$4 \times 3 = \boxed{12}$

b.

$5 \times 4 = \boxed{20}$

3 a. ✓   b. ✓   c. ✗
d. ✗   e. ✗   f. ✗

Assessment – Chapter 2
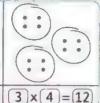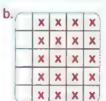
1 a. 30,000   b. 258,731
c. $6,000 + 200 + 30 + 9$
d. =   e. >   f. 3

2 a. ⟶ $4 + 4 + 4$
b. ⟶ $5 + 5 + 5 + 5$
c. ⟶ 2×3
d. ⟶ 3×5

54

3 a. ✓   b. ✗   c. ✗   d. ✗

4 a. 3   b. 2
c. 50,050   d. 3 , 6 , 18
e. 5 + 5   f. 0
g.   4   rows of   3
     4 × 3 = 12

h.   5   groups of   2
     5 × 2 = 10

5 a. The order is : 812,926 ,
812,437 , 100,369 , 99,512 ,
766

b. The order is : 7,403 , 43,007 ,
304,700 , 307,040

6 a. >   b. =   c. >
d. >   e. >   f. <
g. =   h. >

Accumulative Assessment
Till chapter 2

1 a. $3 \times 5 , 3 \times 6$ b. 5
c. 5,631   d. 1,500
e.

2 a. ✗   b. ✓   c. ✗
d. ✓   e. ✗

3 a. 5   b. 30
c. 9   d. 9
e. 55   f. 60

4
a. ⟶ 20 mm
b. ⟶ 200 cm
c. ⟶ 1 m
d. ⟶ 100 mm

5 a. 6   b. 3   c. 9

6

$2 + 2 + 2 = 6$
$3 \times 2 = 6$

7 a. The order is : 7,482 , 12,158 ,
54,658 , 954,201

b. The order is : 833,400 ,
833,312 , 83,987 , 8,315

Sheet 10

1 a. 8   b. 3,700
c. 87,520   d. 12

2 a. 4,000 , 60 , 2   b. 2 , 3
c. 6   d. 10

3 a. $3 \times 4 = 12$ peanuts
b. $7 \times 3 = 21$ mangoes
c. $3 \times 5 = 15$ balls

Sheet 11

1 a. 12   b. 12   c. 0
d. 24   e. 8   f. 10
g. 18   h. 32   i. 24
j. 8   k. 27   l. 16
m. 20   n. 0   o. 14

2 a. 10   b. 12
c. 204,678   d. Thousands
e. 5

3 a. 32 , 34 , 36 , 38 , 40 , 42 , 44 ,
46 , 48 , 50 , 52 , 54 , 56 , 58
b. 33 , 36 , 39 , 42 , 45 , 48 , 51 ,
54 , 57
c. 36 , 42 , 48   (Answer may vary)

Sheet 12

1 a.
- $6 \times 5 = 30$
- $7 \times 4 = 28$
- $6 \times 2 = 12$
- $6 \times 6 = 36$
- $7 \times 6 = 42$
- $5 \times 7 = 35$
- $7 \times 0 = 0$
- $3 \times 9 = 27$
- $2 \times 10 = 20$

b.
- $7 \times 3 = 21$
- $5 \times 9 = 45$
- $7 \times 7 = 49$
- $5 \times 6 = 30$
- $5 \times 5 = 25$
- $6 \times 8 = 48$
- $3 \times 5 = 15$
- $5 \times 4 = 20$
- $7 \times 9 = 63$

c.
- $6 \times 4 = 24$
- $6 \times 10 = 60$
- $1 \times 3 = 3$
- $7 \times 5 = 35$
- $6 \times 3 = 18$
- $7 \times 8 = 56$
- $0 \times 8 = 0$
- $6 \times 9 = 54$
- $5 \times 8 = 40$

2 a. <   b. >   c. >
d. <   e. >   f. =
g. =   h. <   i. <
j. >

3 a. ✗   b. ✓   c. ✗
d. ✓   e. ✓   f. ✗
g. ✓

Sheet 13

1 a.
- $8 \times 2 = 16$
- $9 \times 5 = 45$
- $8 \times 6 = 48$
- $10 \times 2 = 20$
- $8 \times 10 = 80$
- $10 \times 6 = 60$
- $9 \times 6 = 54$
- $8 \times 7 = 56$
- $9 \times 9 = 81$
- $8 \times 9 = 72$

b.
- $10 \times 3 = 30$
- $8 \times 1 = 8$
- $9 \times 7 = 63$
- $8 \times 5 = 40$
- $10 \times 7 = 70$
- $9 \times 8 = 72$
- $10 \times 5 = 50$
- $8 \times 4 = 32$
- $9 \times 3 = 27$
- $8 \times 3 = 24$

c.
- $6 \times 4 = 24$
- $5 \times 6 = 30$
- $6 \times 6 = 36$
- $4 \times 3 = 12$
- $7 \times 10 = 70$
- $6 \times 3 = 18$
- $4 \times 4 = 16$
- $0 \times 7 = 0$
- $8 \times 8 = 64$
- $6 \times 9 = 54$

2 a. ✓ b. ✗ c. ✓
d. ✗ e. ✓ f. ✓
g. ✓

3
- Multiples of 5 are , 15 , 20 , 25 , 30 , 35 , 40 , 45 , 50 , 55 , 60 , 65 , 70 , 75 , 80 , 85 , 90 and 95
- Multiples of 10 are , 20 , 30 , 40 , 50 , 60 , 70 , 80 and 90
- Common multiples of 5 and 10 are , 20 , 30 , 40 , 50 and 60

(Answer may vary)

Sheet 14

1

① ② ③ ⑥
$1 \times 6 = 6$
$2 \times 3 = 6$
$3 \times 2 = 6$
$6 \times 1 = 6$

① ⑨ ③ ㉗
$1 \times 27 = 27$
$3 \times 9 = 27$
$9 \times 3 = 27$
$27 \times 1 = 27$

② ③ ④ ⑥
$2 \times 6 = 12$
$3 \times 4 = 12$
$4 \times 3 = 12$
$6 \times 2 = 12$

2
a. **20**
1×20 20×1
2×10 10×2
4×5 5×4
Factors are :
1 , 2 , 4 , 5 , 10 and 20

b. **12**
1×12 12×1
2×6 6×2
3×4 4×3
Factors are :
1 , 2 , 3 , 4 , 6 and 12

3

18

a. 2×9

b. 9×2

c.

3 × 6

d.

6 × 3

4 a. ⟶ 1 × 0   b. ⟶ 4 × 10

c. ⟶ 2 × 6   d. ⟶ 2 × 9

e. ⟶ 4 × 6

5 a.

5	5
× 0	× 0
5	0

● Not correct

b.

7	7
× 5	× 5
12	35

● Not correct

c.

6	☐
× 3	× ☐
18	☐

● Correct

d.

8	8
× 1	× 1
9	8

● Not correct
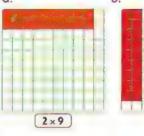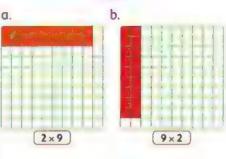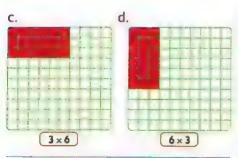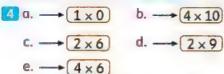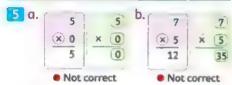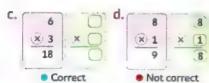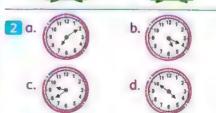
6 a. 42   b. 54   c. 36

d. 70   e. 64   f. 35

g. 16   h. 63   i. 48

7 a. 3 equal rows

, 4 in each row , 12 in all

b. 2 equal columns

, 3 in each column , 6 in all

8 a. 30   b. 3,005

c. Ten thousands   d. 3 × 9

e. <

Sheet 15

1 a. 01 : 25   b. 09 : 20

c. 01 : 50   d. 04 : 10

2 a.   b.

c.   d.

3   07 : 40

4 a. 4,000   b. 56   c. 70

d. 18   e. 24   f. 5

g. 4 × 7 = 28   h. 50

5 04 : 45

Sheet 16

1

a. Divide 6 into 3 equal groups   b. Divide 12 into 4 equal groups
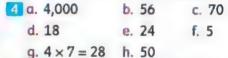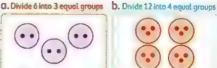
2 in each group.   3 in each group.

2 a. 32   b. 4   c. 39

3 4 apples

4 a. 102,479   b. 3,000

c. 8   d. 6

e. 6

Sheet 17

1 a. 4 b. 7 c. 7 d. 7
e. 9 f. 3 g. 9 h. 1
i. 8 j. 4 k. 6 l. 5

2 a. 6 b. 12 c. 7 d. 3
e. 56 f. 9 g. 3 h. 14
i. 5

3

a. $3 \times 9 = 27$
$9 \times 3 = 27$
$27 \div 3 = 9$
$27 \div 9 = 3$

b. $2 \times 7 = 14$
$7 \times 2 = 14$
$14 \div 7 = 2$
$14 \div 2 = 7$

4

08 : 25

5 a. 2,732 b. 50,809

Assessment – Chapter 3

1 a. 10 b. 12 c. 7
d. 2 e. 30 f. 4

2

1×18 18×1
2×9 9×2
3×6 6×3

Factors are 1 , 2 , 3 , 6 , 9 and 18

3 01 : 25

4 a. 12 b. 0 c. 15
d. 6 e. 10

5 $5 \times 3 = 15$ balls.

6 $3 \times 4 = 12$
$4 \times 3 = 12$
$12 \div 3 = 4$
$12 \div 4 = 3$

Accumulative Assessment

Till chapter 3

1 a. ✓ b. ✗ c. ✗
d. ✗ e. ✓ f. ✗

2 a. 20 b. 7 c. 6
d. 35 e. 10 f. 5

3 a. ⟶ $36 \div 6$
b. ⟶ 1×5
c. ⟶ 2×6
d. ⟶ $7 \div 7$
e. ⟶ 2×1

4 a. 37,465 b. 9 + 9 c. 8
d. 1,400 e. 72 f. 3

5 Order is : 9,009 , 9,999 , 91,005
, 91,500 , 99,007

6

$3 \times 5 = 15$ $5 \times 3 = 15$ $15 \div 5 = 3$

7 $35 \div 7 = 5$ pounds.

8 a. 3 b. 5 c. 16

Sheet 18

1

[rectangle] , [cube] , [ellipse]

2
a. → 6 × 6
b. → 1 × 0
c. → 2 × 10
d. → 2 × 4
e. → 30 ÷ 3

3
a. triangle   b. 6
c. 4   d. heptagon
e. 5 , 5   f. sides , vertices

4
a. 4 sides | b. 3 vertices | c. 6 sides

Answer may vary

Sheet 19

1 a. Trapezium   b. Square
c. Rectangle
d. Parallelogram

2 a. 4   b. 2   c. 4
d. 1   e. 2   f. 7
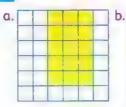
3 a. 7 × 2 = 14   b. 9 × 3 = 27
14 ÷ 2 = 7   27 ÷ 3 = 9
14 ÷ 7 = 2   27 ÷ 9 = 3
c. 3 × 6 = 18
6 × 3 = 18
18 ÷ 6 = 3
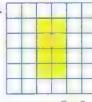
4 30 ÷ 6 = 5 monkeys can be fed.

Sheet 20

1 a. Area = 4 × 7 = 28 □
b. Area = 4 × 4 = 16 square units
c. Area = 12 □

2
a. [grid]   b. [grid]

5 × 3 = 15   4 × 2 = 8
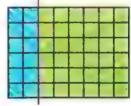
3 a. 2 , 4
b. 70,000 + 3,000 + 200 + 80 + 9
c. 3   d. 15,789   e. 4

4 a. square   b. parallelogram
, 4   , 2
, 2   , 2
, 4   , 4

Sheet 21

1 a.   Answer may vary

[grid]

$6 \times 2 = 12$

$6 \times 6 = 36$

$12 + 36 = 48$

$6 \times 8 = 48$

$6 \times 8 = (6 \times 2) + (6 \times 6)$

b.

$4 \times 4 = 16$

$4 \times 5 = 20$

$16 + 20 = 36$

$4 \times 9 = 36$

$4 \times 9 = (4 \times 4) + (4 \times 5)$

2 a. 8   b. 8 , 5   c. 5 , 8
d. 3 , 5   e. 5   f. 7 , 6
g. 5 , 15   h. 3 , 13   i. 4 , 10
j. 6 , 12

3 a. 26 , 29 + 3
b. 22 , 20 − 2

4

4 rows of 2	7 columns of 3	1 row of 5
a.	b.	c.

5 a. 12   b. 32   c. 54
d. 50   e. 4   f. 5
g. 5   h. 4   i. 7,542
j. 5,089   k. 5   l. 2
m. 15

6 a. 03 : 25   b. 08 : 50
c. 01 : 45   d. 11 : 55

7 The order is : 79,999 , 390,571 , 391,897 , 735,429 , 745,216

Assessment – Chapter 4

1 a. Circle   b. 6 sides
c. Trapezium   d. 9 ☐
e. 4 × 9

2 The area = 6 × 8
= 48 square units

3 6 × 7 = (6 × 5) + (6 × 2)
= 42 square units

4 a. Rectangle, 4 , 4
b. Hexagon , 6 , 6

Accumulative Assessment
Till chapter 4

1 a. 765 , 876   b. 53,538
c. 10   d. 5
e. 300   f. 15
g. 3

2 a. ✗   b. ✓
c. ✓   d. ✓
e. ✗   f. ✓
g. ✗

3 a. Area = 6 × 4
= 24 square units.

b. Area = 3 × 6

= 18 square units.

c. Area = 10 ☐

4 a. Parallelogram   b. Trapezium

, 2   , 0
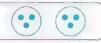
, 2   , 1

, 4   , 4

5
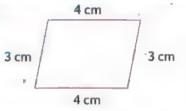
3 + 3 = 6

3 × 2 = 6

6

Saved coins		
Day	Tally	Number
Sunday	‖‖	4
Monday	‖‖‖	6
Tuesday	‖‖ ‖‖	10
Wednesday	‖‖	5

Sheet 22
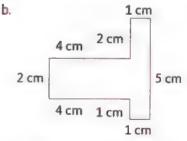
1 a. 14 , 12   b. 18 , 12

2 a.

Perimeter = 3 + 4 + 3 + 4

= 14 cm

b.
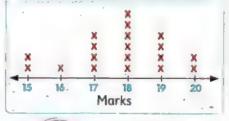
Perimeter = 1 + 2 + 4 + 2

+ 4 + 1 + 1 + 5

= 20 cm

3 Perimeter = 4 + 4 + 3 = 11 cm

4 a. trapezium   b. 1

c. 2 × 6   d. 7   e. 12

f. 6 × 7   g. 24   h. 7

i. 305,251

5

Marks of students in an exam

Marks

Key Each **x** = 1 student

6 05 : 45

Sheet 23

1 a.

4 cm
4 cm

Area = 4 × 4
= 16 square centimeters

b.

5 cm
2 cm

Area = 5 × 2
= 10 square centimeters

c.

5 cm
1 cm

Area = 5 × 1 = 5 square centimeters

2 a.

3 cm   3 cm
3 cm

• Perimeter = 3 + 3 + 3
= 9 cm
• Name : Triangle

b.

5 cm
2 cm   2 cm
5 cm

• Perimeter = 5 + 2 + 5 + 2
= 14 cm
• Name : Rectangle

3 a. 36 , 40 , + 4

b. 20 , 15 , − 5
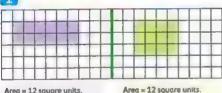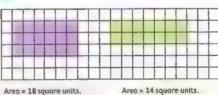
4 What Sara eats in a week = 5 × 7
= 35 carrots

Sheet 24

1

Area = 12 square units.
Perimeter = 16 length units.

Area = 12 square units.
Perimeter = 14 length units.

2

Area = 18 square units.
Perimeter = 18 length units.

Area = 14 square units.
Perimeter = 18 length units.

3 a. 9 × 3

b. 700,000 + 50,000 + 3,000 + 900 + 20

c. 42   d. 8   e. 200

Sheet 25

1 The perimeter
= 15 + 10 + 15 + 10 = 50 cm

2 The area
= 4 × 5 = 20 square meters

3 The number of oranges in each plate = 21 ÷ 3 = 7 oranges
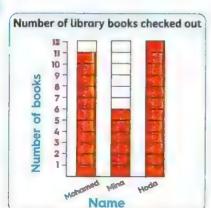
4 a. 20   b. 21   c. 42
d. 36   e. 5   f. 8

5 The order is : 579,989 , 589,979 , 740,852 , 952,640

6

Number of library books checked out

a. 11   b. 18

Sheet 26

1
a. 300	b. 60	c. 200
d. 140	e. 480	f. 270
g. 150	h. 420	i. 280
j. 180	k. 210	l. 450

2 a. 53,004 b. Thousands
c. 98,310 d. 10   e. 36
f. $3 \times 2 = 6\ \square$

3 $5 \times 8 = 40$
$8 \times 5 = 40$
$40 \div 5 = 8$
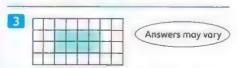$40 \div 8 = 5$

4 a. <   b. >   c. >
d. <   e. =   f. =

Assessment - Chapter 5

1 a. Perimeter = 12 cm
Area = 8 square centimeters

b. Perimeter = 16 cm
Area = 15 square centimeters

2

Answers may vary

3

Answers may vary

4 a. ⟶ 60×2
b. ⟶ 6×30
c. ⟶ 6×10
d. ⟶ 4×40

5 The length of the border
$= 40 + 30 + 40 + 30$
$= 140$ cm

Accumulative Assessment
Till chapter 5
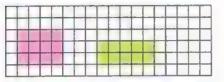
1 a. 30,003   b. △ , ▭
c. 9   d. 6
e. 10   f. 20
g. 210

2 a. >   b. =
c. 100   d. 10
e. 6,000

3 a. ✓   b. ✓   c. ✗

d. ✓   e. ✗

4 The perimeter

$= 3 + 1 + 3 + 1 = 8 \text{ m}$

5 a. half past 1   b. quarter to 5

01 : 30   04 : 45

6 Answers may vary

7

Saved coins

Day	Tally	Number
Sunday	|||	3
Monday	ⵌ	5
Tuesday	ⵌ ⵌ	10
Wednesday	ⵌ ||	7

Saved coins

Sheet 27

1 a. 150   b. 800   c. 18,000

d. 3,500   e. 1,200   f. 32,000

g. 1,800   h. 7,200   i. 2,800

2 a. $2 \times 2 = 4$ b. $2 \times 3 = 6$

c. $5 \times 3 = 15$ d. $4 \times 1 = 4$

e. $2 \times 4 = 8$ f. $4 \times 4 = 16$

g. $9 \times 3 = 27$

3 $6 \times 3 + 6 \times 2 = 18 + 12 = 30$

4 a. Trapezium   b. Parallelogram

c. Square   d. Rectangle

Sheet 28

1 a. 2   b. 5   c. 54

d. 63   e. 4   f. 0

g. 72   h. 9   i. 90

j. 64   k. 42   l. 9

m. 49   n. 8   o. 3

2 The order is : 204,111 , 203,415 ,

170,072 , 52,791

3 a. 01 : 15   b. 05 : 55

c. 04 : 40

4 a. 200 mL   b. 2 L   c. 350 mL

5 The length of fence $= 150 + 100$

$+ 150 + 100 = 500 \text{ m}$

Sheet 29

1 a. 5   b. 24   c. 0   d. 3
   e. 1   f. 81   g. 10   h. 9
   i. 2   j. 0   k. 1   l. 10
   m. 5   n. 2   o. 0

2 a. 3   b. 8   c. 6

3 a. 2 , 4 , 8   b. 1 , 6 , 6

4 The order is : 97,988 , 178,000 ,
201,003 , 432,823

Sheet 30

1 a. 50,000   b. 79,999
   c. 705,030
   d. Hundred thousands
   e. 0×10 f. 74,005
   g. <   h. 10

2 a. 2   b. 7   c. 6   d. 7
   e. 3   f. 2   g. 45   h. 14
   i. 56   j. 5   k. 4,200   l. 72

3 a. Rectangle , 4 , 4
   b. Hexagon , 6 , 6
   c. Triangle , 3 , 3

Sheet 31

1 a. $700 + 20 + 8$
   $\underline{100 + 80 + 9}$
   $800 + 100 + 17 = 917$

$$\begin{array}{r} ①① \\ 728 \\ + 189 \\ \hline 917 \end{array}$$

b. $500 + 40 + 3$
   $\underline{50 + 8}$
   $500 + 90 + 11 = 601$

$$\begin{array}{r} ①① \\ 543 \\ + 58 \\ \hline 601 \end{array}$$

2 a. $315 + 148 = 463$
   b. $166 + 294 = 460$

3 a. $\boxed{02 : 00}$
   It's 2 o'clock
   b. $\boxed{11 : 45}$
   It's quarter to 12
   c. $\boxed{04 : 15}$
   It's quarter past 4

4 a. mm   b. m

Sheet 32

1 a.
$$\begin{array}{r} 4 \;\; 15 \;\; 12 \\ \not{5} \;\; \not{6} \;\; \not{2} \\ - \; 2 \;\; 7 \;\; 9 \\ \hline 2 \;\; 8 \;\; 3 \end{array}$$
   $279 = 200 + 70 + 9$
   $562 - 200 = 362$
   $362 - 70 = 292$
   $292 - 9 = 283$

b.
$$\begin{array}{r} 7 \;\; 10 \\ 3 \;\; \not{8} \;\; \not{0} \\ - \;\;\;\; 7 \;\; 4 \\ \hline 3 \;\; 0 \;\; 6 \end{array}$$

$74 = 70 + 4$

$380 - 70 = 310$

$310 - 4 = 306$

2 a. >   b. >   c. =   d. >

e. >   f. >   g. <   h. >

i. =   j. =   k. >

3 a. 3,600   b. 56,000   c. 32

d. 20,000   e. 81   f. 56

g. 43 , 53
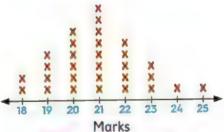
4 The area = $3 \times 2 = 6$ square meters

She will need 6 tiles.

Sheet 33

1 What she has left = $435 - 118$

$= 317$ cards

2 The greatest number

$= 416 + 245 = 661$ passengers

3 The price of the mobile and

speaker = $3,250 + 675$

$= 3,925$ pounds

What has left = $6,000 - 3,925$

$= 2,075$ pounds

4 a. 903   b. 945   c. 60

d. 3,829   e. 750   f. 585

5

Marks of students in an exam		
Marks	Tally	Number of students
18	||	2
19	||||	4
20	ⅢⅢ |	6
21	ⅢⅢ |||	8
22	ⅢⅢ	5
23	|||	3
24	|	1
25		1

Marks of students in an exam

Marks

Key Each **X** = 1 student

Sheet 34

1 a. 11,000   b. 70   c. 4

d. 56   e. mL   f. 2,100

g. 7   h. 17,600

2 a.   b.

3

a.

07 : 55

b.

04 : 10
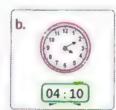
Assessment - Chapter 6

1 a. 641   b. 2,000   c. 21,000

d. 40,000   e. 806,258   f. 7

2 a. 885   b. 3,850   c. 4,265

d. 3,749

3

4 a. 63   b. 3   c. 120

d. 7,000   e. 5   f. 4

5 The cost of T.V. and speaker =
4,500 + 375 = 4,875 L.E.
The money left = 7,000 – 4,875
= 2,125 L.E.

Accumulative Assessment
Till chapter 6

1 a. ✗   b. ✓   c. ✓

d. ✗   e. ✗   f. ✓

2 a. 4 ⑤ /6\ , 5 ⑥ /7\
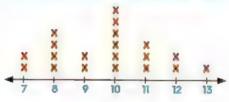
b. 5   c. 5

d. Hundreds   e. 25   f. 7

3 a. 459   b. 424

c. 6,613   d. 4,433

4 The total amount = 540 + 475
= 1,015 pounds

5 a. 7   b. 7   c. 21

d. =   e. 7   f. 20

6 a. ⟶ 7,419   b. ⟶ 374

c. ⟶ 335   d. ⟶ 509

7

Ages of children in karate class

Age in years

Key Each ✗ = 1 child

a. 3   b. 10   c. 20

Answers of General Revision

1 a. 2   b. 50   c. 57 , 47
d. ▲▲   e. 122 , 125
f. 26 , 30   g. 35 , 40 , 45

2 a. ✗   b. ✗   c. ✓
d. ✓   e. ✗   f. ✗
g. ✓

3 a. mm   b. m
c. mm   d. m

4

Favorite ice cream flavor	
Flavor	Tally
Chocolate	ЖI
Vanilla	ЖI ЖI II
Caramel	ЖI
Strawberries	ЖI IIII
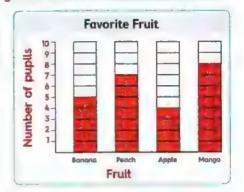
a. 32   b. 12
c. strawberries   d. caramel

5 a. ⟶ 10 mm   b. ⟶ 100 cm
c. ⟶ 10 cm   d. ⟶ 110 mm

6 a. 37 mm   b. 58 mm   c. 50 mm
d. 43 mm   e. 26 mm
The order is : 26 mm , 37 mm ,
43 mm , 50 mm , 58 mm

7 a. 2 players   b. 24 years
c. 4 players   d. 11 players

8

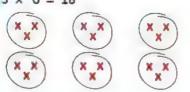| Favorite Fruit		
Fruit	Tally	Number
Banana	ЖI	5
Peach	ЖI II	7
Apple	IIII	4
Mango	ЖI III	8

Favorite Fruit

1 a. 1,549
b. 50,000 + 1,000 + 400 + 80 + 4
c. 2,705   d. Ten thousands
e. 0   f. 3 , 21

2 a. 60,260   b. 34,890   c. 4,000
d. Hundred thousands
e. 5 + 5 + 5

3 a. ✓   b. ✗   c. ✗
d. ✗   e. ✗

4 3 × 4 = 12

5 3 × 6 = 18

6 a. > b. = c. > d. >

e. > f. < g. = h. >

7 • The greatest number is 9,540

• The smallest number is 4,059

8 a. • 3 rows of 4

4 + 4 + 4 = 12

3 × 4 = 12

• 5 rows of 2

2 + 2 + 2 + 2 + 2 = 10

5 × 2 = 10

b. • 2 groups of 4

4 + 4 = 8

2 × 4 = 8

• 4 groups of 3

3 + 3 + 3 + 3 = 12

4 × 3 = 12

9 a. The order is : 833,400 ,

833,312 , 83,987 , 8,315

b. The order is : 499,145 ,

69,270 , 9,654 , 9,325

10 a. The order is : 7,482 , 12,158 ,

54,658 , 954,201

b. The order is : 9,807 , 28,009 ,

67,512 , 805,325

Chapter 3

1 a. 27 b. 5 c. 3 d. 8

e. 8 f. 0 g. 24 h. 25

i. 4 j. 9 k. 8 L. 8

m. 7 n. 63 o. 20 p. 42

q. 15 r. 6 s. 90 t. 72

u. 6

2 a. < b. < c. > d. =

e. = f. < g. > h. >

3 a. 2 × 3 = 6

3 × 2 = 6

6 ÷ 2 = 3

6 ÷ 3 = 2

b. 3 × 5 = 15

5 × 3 = 15

15 ÷ 3 = 5

15 ÷ 5 = 3

4 a. ⟶ (3 × 4)   b. ⟶ (4 × 6)

c. ⟶ (30 + 6)   d. ⟶ (1 × 9)

e. ⟶ (2 × 4)

5 1 × 12 , 12 × 1

2 × 6 , 6 × 2

3 × 4 , 4 × 3

• Factors are : 1 , 2 , 3 , 4 , 6 and 12

6 a. 1 : 25   b. 6 : 50

7

a.   b.

12 : 20   4 : 55

8

9 40

10 14 , 8 , 10 , 20

11 60 , 80 , 50 , 100 , 10

12 2

13 3 , 6 , 9 , 12 , 15 , 18

14 15 , 20 , 25 , 30 , 35 , 40

15

4 , 4   4

16 a. The number of seeds = 5 × 7

= 35 seeds

b. The number of strings = 6 × 10

= 60 strings

Chapter 4

1 a. square , 4 , 2 , 4

b. rectangle , 2 , 2 , 4

c. parallelogram , 2 , 2 , 4

d. rhombus , 4 , 2 , 4

e. trapezium , 0 , 1 , 4

2 a. 2 × 4 = 8   b. 3 × 6 = 18

c. 5 × 4 = 20   d. 5 × 6 = 30

e. 6 × 4 = 24   f. 4 × 4 = 16

3 a. trapezium   b. 6

c. pentagon   d. 1

e. 4   f. 9

4 a. parallel   b. 3

c. 15   d. 4

e. 2   f. octagon

5 a. ✓ b. ✓ c. ✗

   d. ✗ e. ✗ f. ✓

6

| $3 \times 5 = 15$ | $2 \times 9 = 18$ | $4 \times 6 = 24$ |

| $6 \times 3 = 18$ | $3 \times 8 = 24$ | $5 \times 3 = 15$ |

---

7 a. $6 \times 4 = 24$

   (Answers may vary)
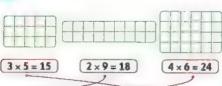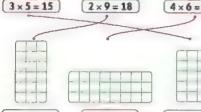
   $6 \times 3 = 18$

   $24 + 18 = 42$

   $6 \times 7 = 42$

   $6 \times 7 = (6 \times 4) + (6 \times 3)$

   b. $6 \times 4 = 24$

   $6 \times 4 = 24$

   $24 + 24 = 48$

   $6 \times 8 = 48$

   $6 \times 8 = (6 \times 4) + (6 \times 4)$

Chapter 5

1 a. Perimeter = $4 + 5 + 6 = 15$ cm

   b. Perimeter = $3 + 4 + 3 + 5 = 15$ cm

---

2 a. 18 , 18   b. 14 , 12

   c. 14 , 9   d. 20 , 24

---

3 (Answers may vary)

---

4 (Answers may vary)

---

5 The perimeter = $2 + 1 + 2 + 1$

   $= 6$ m

---

6 The area = $5 \times 3 = 15$ square meters

---

7 a. 80   b. 450   c. 240

   d. 270   e. 180   f. 280

   g. 350   h. 150   i. 180

   j. 420

---

8 a. $(9 \times 5) \times 10 = 45 \times 10 = 450$

   b. 12 , 120

   c. $(5 \times 6) \times 10 = 30 \times 10 = 300$

   d. 14 , 140

   e. $(3 \times 2) \times 10 = 6 \times 10 = 60$

   f. 35 , 350

   g. $(9 \times 2) \times 10 = 18 \times 10 = 180$

   h. 27 , 270

Chapter 6

1 a. 40   b. 12
c. 180   d. 3,000
e. 81   f. 0
g. 350   h. 0
i. 5,400   j. 32
k. 6   l. 1,400
m. 72   n. 21,000
o. 18,000   p. 20,000
q. 0   r. 2,700

2 a. 705   b. 357
c. 341   d. 876
e. 91   f. 1,110
g. 3,405   h. 2,149
i. 6,150   j. 6,210
k. 4,718   l. 2,297
m. 1,606   n. 1,464
o. 4,000   p. 212
q. 3,936   r. 6,364

3 a. Hundred thousands
b. Hundreds
c. Tens
d. Ten thousands

4 a. 7,000   b. 0
c. 30,000   d. 2

5 a. >   b. >   c. >   d. >
e. >   f. =   g. <   h. >
i. =   j. >

6 a. 2 L   b. 10 mL   c. 50 L

7 a. 30 mL   b. 60 mL   c. 80 mL

8 a. 5,000   b. 17,000   c. 7
d. 10   e. L   f. L
g. mL

9 a. What Bassem paid = 5 × 90
                     = 450 pounds

b. The remainder = 5,000 − 3,550
                    = 1,450 L.E.

c. The number of all trees
    = 475 + 516 = 991 trees

d. What she spent = 1,250 + 375
                  = 1,625 pounds

The money left with her
= 3,000 − 1,625
= 1,375 pounds

Answers of
Final Assessments
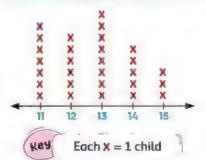
Model 1

1 a. 840 b. > c. 30,785

d. 12 e. 4 f. 2

---

2 a. 1,200 b. 451,331

c. 8,598 d. $3 + 4 + 5 = 12$

e. 6 f. 9

---

3 a. The number of eggs in each
plate = $15 \div 5 = 3$ eggs

b. 06 : 15 , quarter past six

c.

5 cm

2 cm

• Perimeter = $5 + 2 + 5 + 2$
  = 14 cm

• Area = 5×2
  = 10 square centimeters

d. ① 25 ② 30

③ 71 ④ 15

4

Length of hand		
Length	Tally	Number
11 cm	‖‖‖ ‖	7
12 cm	‖‖‖ ‖	6
13 cm	‖‖‖ ‖‖	8
14 cm	‖‖‖	5
15 cm	‖‖‖	3

Length of hand

Key Each **x** = 1 child

Model 2

1 a. Ten thousands b. 6

c. 12 d. >

e. 15 f. 1,200

---

2 a. 56

b. $20,000 + 5,000 + 600 + 7$

c. 22

d. rectangle , rhombus , square

e. 3,000

f. 36 , 40 , 44

---

3 a. 30

b.

c. The order is : 105,000 ,
501 hundreds , 50 thousands
, 15,001

73

d. The number of apples = 6 × 9

= 54 apples

e. ① 826 ② 3,275

f.

Favorite color

Color	Tally	Number
Green	IIII	5
Red	IIII IIII	9
Yellow	IIII	4
Blue	IIII II	7

Favorite Color

c. ┌ 4 rows of 2 ┐ ┌ 3 columns of 5 ┐

```
X X          X X X
X X          X X X
X X          X X X
X X          X X X
             X X X
```

d. 35   e. 2 × 5 = 10

Model 4

1 a. <   b. 20   c. 14
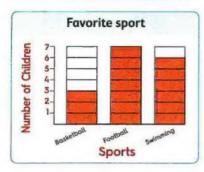
d. 240   e. 40   f. 72

2 a. 70,000 + 8,000 + 30 + 2

b. 3   c. 3   d. 80

e. 11,025   f. ◯◇

3 a. square , 4 , 2 , 4

parallelogram , 2 , 2 , 4

b.

c. • Perimeter = 3 + 3 + 3 + 3

= 12 cm

• Area = 3 × 3

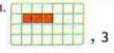= 9 square centimeters

d. What Sarah has = 4 × 5

= 20 sweets

Model 3

1 a. ×   b. 30   c. 50,000

d. =   e. ◯   f. 2

2 a. 500   b. 7,000   c. 1 , 2 , 4

d. 25   e. 12   f. 3,275

3 a. The number of marbles =

153 + 223 = 376 marbles

b. The order is : 24,362 ,

325,261 , 532,271 , 532,272

e.

Favorite sports

Sports	Tally	Number
Basketball	|||	3
Football	||||| ||	7
Swimming	|||||		6

Favorite sport

c. $462 + 241 = 703$

d. ① 56   ② 35   ③ 9   ④ 8

e.

Favorite pet

Pet	Tally
Cat	||||
Dog	||||| ||
Fish	||||| |||||

Model 6

1 a. =   b. 4   c. 80

d.   e. 20   f. 9,648

2 a.

b. 968,431   c. 6

d. 203,456   e. 4

f. 2,030

Model 5

1 a. 8   b. 3×4

c. 0   d. 70

e. circle   f. trapezium

2 a. 3,205   b. 4,187

c. 5   d. 64 , 54

e. 3   f. 1 , 2 , 3 , 4 , 6 , 12

3 a. , 3

b.

3 a. $231 + 560 = 791$

b. $6 \times 4 = 24$
$4 \times 6 = 24$
$24 \div 6 = 4$
$24 \div 4 = 6$

c. ① 02 : 45 It is quarter to three

② 06 : 15 It is quarter past six
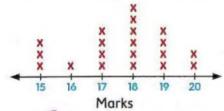
d. Number of borrowed and
missed books = $1,580 + 370$
            = 1,950 books
Number of books in the
library = $5,775 - 1,950$
            = 3,825 books

75

e.

Marks of students in an exam

Marks	Tally	Number of students
15					3
16			1
17						4
18								6
19						4
20				2

Marks of students in an exam

Marks

Key Each **X** = 1 student

Model 7
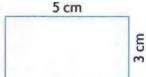
1 a. 6   b. 180   c. 6

d. 300,000   e. =   f. 8×9

2 a.

$$+2 \quad +2 \quad +2$$

30 , 32 , 34 , 36

b. 35,000

c. 4 rows of 3 , $4 \times 3 = 12$

d. 21   e. 6   f. 20,757

3 a. The order is : 97,394 , 97,541

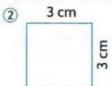, 725,743 , 734,520

b. (1) 03 : 00

3 o'clock

(2) 09 : 45

quarter to 10

c. (1) 10,307   (2) 3,162

(3) 56   (4) 8
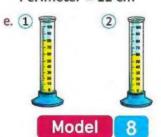
d. (1)

5 cm

3 cm

Area = 15 square centimeters
Perimeter = 16 cm

(2) 3 cm

3 cm

Area = 9 square centimeters
Perimeter = 12 cm

e. (1)   (2)

Model 8

1 a. $40 \div 5$ b. 1   c. 2,000

d. 11   e. 30   f. 5

2 a. 900,000 , 30,000 , 400 , 20

b. 4   c. 14   d. 7

e. 0   f. 63

3 a. ① 35 ② 53 ③ 42

b. ① 6,150 ② 381 , 850 , 1,231

c. ① ⟶ 4 × 6 ② ⟶ 20 − 6

③ ⟶ 2 × 6 ④ ⟶ 7 × 0

d. 2

e.

4 cm

2 cm

Area = 8 square centimeters
Perimeter = 12 cm

4 cm

4 cm

Area = 16 square centimeters
Perimeter = 16 cm

Model 9

1 a. 8 b. 9 c. 150

d. < e. 750,843 f. 580

2 a. 17 b. 1 , 2

c. 4,000 , thousands

d. 6 e. 6,218

f. 1 , 2 , 4 , 8

3 a.

5 × 4 = 20

b. ① 81 ② 756

c.
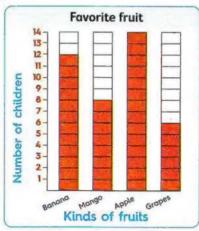
The perimeter = 5 + 4 + 5 + 4
= 18 length units

d. The number of dogs = 32 ÷ 4
= 8 dogs

e.

03 : 45

f.

Favorite fruit

Number of children

Kinds of fruits

Banana Mango Apple Grapes

Model 10

1 a. 6,502 b. 45

c. 10 mm d. =

e. 7,000 f. 17,000

2 a. 50   b. 11

c. 500,740   d. 0

e. ☆☆☆☆☆☆☆☆

3 a.

b. The number of books left
= 7,530 − 2,370
= 5,160 books

c.

Shape	Name	Number of sides	Number of vertices
▢	Square	4	4
◇	rhombus	4	4
⬠	pentagon	5	5

d.

Favorite color		
Color	Tally	Number
Red	III	3
Blue	HHT II	7
Yellow	HHT HHT I	11
Black	IIII	4

① 7

② Yellow

③ 4